REVENUES AND EXPENDITURES OF STATE AND LOCAL GOVERNMENTS IN THE NORTHWEST AREA
A Census-Geographical Profile

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GOVERNMENT AND COMMUNITY

The map of personal income summarizes much that can be said about the whole spectrum of geographic variation of purchasing power and wealth across the Northwest Area (Figures 2, 3; Table 1).

Income variations on that map reflect the geographic patterns of resources, urbanization, culture, human capital, and locational advantages or disadvantages in the transporation network. Those same income variations underlie differences from one place to another in the quality of life--differences in basic knowledge, information, health, and mobility; differences in investment in housing, public improvements, business buildings, recreational facilities, and highways.

To attempt to compensate for those income differences--to try to reduce extreme inequalities in quality of life among neighbors--has been a traditional function of communities.

Citizens have used general government--local, state, and national--as one very important framework to organize communities to reduce the effects of extreme differences in personal income. Those public communities use their powers to tax income, sales, and property wherever income is generated and money is spent or invested within their jurisdictions. And, in turn, they provide subsidies and income support where those are needed to help compensate for income inequalities.

The result is income redistribution not only through direct welfare payments but also through other public enterprises. For example, local governments provide complete networks of roads, schools, utilities, and other improvements or services to every part of their jurisdictions, rich or poor, with rate structures and subsidies designed to make them equally available to virtually every household, without regard for ability to pay. State aids partly compensate for differences in local wealth and tax base, among local government jurisdictions, to support those services. Federal aids, in turn, partly compensate for differences between the states and between certain types of local areas.

These income-redistributing service enterprises account for most of the public budget below the federal level. Over the past century they have grown to 85 to 95 percent of state and local government expenditures and a similar proportion of revenues. The effect--and usually the goal--has been to organize communities to attempt to compensate for extreme income differences and thus to increase the community quality of life.

With the growing use of government for this sort of community organization, one result has been the well-known, continuing debate over which services and goods and income maintenance should be provided at what minimum levels. For example, while equal opportunity for education and road access have become accepted as basic rights, we are far from agreement on how or how far beyond that to draw the line. Decisions to use government in this way have defined and redefined the public's business, or the "public sector of the economy."

The appropriate geographic scale for these income-redistributing enterprises has also posed a persistent problem. To which community do we belong for the purpose of providing a minimum level of certain services and goods? Should I support such activities in the city or county in which I live but not other places beyond its limits? Should I support the community role of the state in which I live but not other state communities? For example, under what circumstances is it reasonable to use taxes collected in Seattle for state expenditures in Tacoma, taxes from Sioux Falls for state expenditures in rural South Dakota, taxes from Minneapolis and St. Paul for federal expenditures in North Dakota? How do we divide our emotions, commitments, and resources among these different levels of citizenship?

Ability to deal with these questions depends partly on the knowledge and understanding with which each citizen views his or her own geographical and social position in the world. And it depends partly on how well organizations of all sizes display enough efficiency and sensitivity to command the respect of the people who must support them. Maps of U. S. Census data reflect some of the range of circumstances and variety of goals and values with which people in different governmental units in the Northwest Area have dealt with these issues--what services? what level of governemnt? how much money? **The efforts which underlie these maps and tables provide an important setting, perhaps even a basic component, of the region's philanthropic enterprise.**

THE TAX BASE

The geographic pattern of variation in tax base closely follows the pattern of personal income. Localities with higher income generate not only higher income tax revenues but also more retail sales taxes, higher property taxes, and higher revenue from fees and special charges. To be sure, the pattern of tax revenues is somewhat more uneven than the pattern of income. Sales tax collections are not evenly distributed over the more than 400 counties that make up the Northwest Area. Instead they tend to be concentrated in about 120 urban centers of 5,000 population or larger (Figure 1). Their counties account for most of the retail sales. While per-capita income is typically a few percentage points higher in those urban counties than it is in neighboring more rural counties, retail sales per capita are typically 50 to 100 percent higher. Compared with rural counties, assessed valuation per capita is typically a few points higher in adjacent urban counties and up to twice as high in the major metropolitan areas. **Thus, while the pattern of tax base variations tends to follow the income pattern, the highs and lows are accentuated by the additional effects of urban and metropolitan concentration of both retail sales and property investment.**

Table 1 compares 1984 incomes with the means for 1970, 1980, and 1984, in constant 1984 dollars. (1984 is the most recent year summarized in the Statistical Abstract of the United States, and Wisconsin is added to the eight Northwest Area states for comparison.) Those average numbers are slightly lower than the 1984 figures taken alone. The difference reflects over-all economic growth during the 14-year period. But the pattern of variation among states for 1984 is also somewhat different than the pattern for the mean of the three years. The mean numbers tend to smooth the effects of recent or

short-term fluctuations. They reflect more accurately the longer-term average incomes on which revenue expectations, community demands, and tax policies might logically rest. Therefore, for most calculations involving income data, this report uses the 3-year mean.

In 1984, personal income per-capita among Northwest Area states was highest in Minnesota and Washington, moderately high in Oregon, Iowa, and Wisconsin, and lowest in the Great Plains and Mountain states, especially South Dakota and Idaho (Table 1 and Figure 2). The differences reflect mainly the locations of large metropolitan concentrations of professionals, managers, and proprietors, together with the highest concentration of fertile, well-watered land for agriculture. Minnesota, Washington, Oregon, Iowa, and Wisconsin have tended to have state per-capita incomes near or above the national average, other states have consistently fallen below. Use of the 3-year mean instead of 1984 figures makes Northwest Area incomes, compared with the U.S. average, slightly higher and less variable from state to state (Table 1). Within the region, the effect is to raise the relative income level in the Pacific Northwest states and to lower it for Minnesota and South Dakota. The Pacific Northwest lost the most ground since 1980, while Minnesota and South Dakota gained the most in the same period.

Income figures for states mask a far more complex pattern of differences among counties (Figure 3). While the highest state figure is only about 1.3 times as high as the lowest, average per-capita income in the most affluent county is nearly 4 times that in the poorest county. Yet the more detailed pattern still reflects the same basic variables--urbanization and rich farmland. Because county sizes are generally smaller east of Montana, there are more counties without any urban center. In the western states, counties tend to be much larger; hence most contain an urban place. As a result, county average incomes tend to be higher in the west. The large county sizes mask income differences between town and country, while the finer screen of smaller counties in the east reveals those differences more effectively.

STATE AND LOCAL GOVERNMENT REVENUES

From this geographically uneven tax base, revenues are raised by federal, state, and local governments (Figure 4, Table 2). **The stream of revenue flows from its multiple origins through a very complex, braided mass of channels--hundreds of intergovernmental aid and transfer programs, thousands of agencies. But at the bottom line there is a net flow to local units--county, town, municipal governments, school boards, and other special districts.** Federal aids flow directly to the local governments, or they are received by the state then passed through to local units. Or the state redistributes some of its own revenue through local units according to formulas that attempt to measure local need.

The Northwest Area as a whole is well above the national average in the amount of intergovernmental revenue flow and in the extent to which states compensate for uneven local tax bases. At the same time, there are wide variations among the different states. Some states pass most of their federal payments to the local level and embellish them with aids from the state's own revenue base. Others keep federal payments in excess of the total aids they

distribute to local units. The amount of state revenue redistributed to local units tends to be greater in the states where personal income is higher.

Local revenues depend mainly on property taxes, charges for sewer and water services, and special enterprises such as municipal electric utilities and liquor stores. But the states tap their revenue bases in a wider variety of ways. The three major sources are sales taxes, special charges and royalties (notably user charges, mineral royalties, and state liquor monopolies), and income taxes, in that order (Table 3). The four northwest states and Iowa operated state liquor retailing in 1984; North Dakota and Montana collected important mineral royalties; South Dakota's dependence on charges and fees was relatively high in part because the state's total revenue from other sources was so much lower than the other states.

Revenue Per Capita

Per-capita revenue of state and local governments varies widely among the states (Figures 5, 6). Uneven federal transfers account for part of the variation. They reflect differences in welfare payments for Indian populations, areas impacted by federal installations, and the intensity of state matching funds to attract a wide variety of federal program funds. But the bulk of the variation is the result of differences in the amounts of money state and local governments raise from their own sources. The states vary more in the amount they tax than they vary in the depth of their tax bases. The variety is generally a reflection of complex differences in local policies and problems; though it is also partly the result of unusual opportunities to tax multi-state income through royalties on mineral exports--notably in North Dakota.

Per-capita state and local government own-source revenues changed dramatically in the quarter-century from 1960 to 1985 (Figure 7). After correcting for inflation, the revenue slightly more than doubled. Meanwhile, the Area's position changed relative to the rest of the country. All of the states were at or above the national average in the first few years of the period. But since the late 1960s, half the states fell below the national level. At the same time, the spread between the highest and lowest states in the Northwest Area widened. There has been some variation in rank order among the Area states. Although Washington and Minnesota have been fairly consistently high and Idaho and South Dakota persistently low, all have shifted by several positions in the order from year to year. All area states dropped dramatically in the period of recession, tax-cutting, and shortfalls in the early 1980s, and most rose again in widely varying efforts to make up for reductions in federal aids in the mid-1980s.

Tax Effort or Tax Burden

The percentage of personal income used for the government enterprise is often called the "tax effort" (implying willingness to pay taxes to meet costs of doing the public's business), or the "tax burden" (to imply imposition of taxes by one part of the community upon another for purposes not agreed upon). In Northwest Area states and Wisconsin, the state and local tax effort in 1984 ranged from 11.4 percent in South Dakota to 15.7 percent in Minnesota

(Figure 8). It is not useful to separate state and local expenditures for that comparison, because of the variety of ways in which different states combine funds from state and local sources to achieve essentially the same purposes.

Quarter-Century Trend

From the early 1960s to the mid-80s, tax efforts changed almost as dramatically as per-capita revenues (Figure 9). Again, the region tended to follow the national trend; and it also dropped, over-all, relative to the national average. Several states appeared to reduce their effort in response to temporary, localized slowdowns in personal income growth but not to increase it again when income growth resumed. With the gradual subsidence of the "war on poverty" in the 1970s the effort declined generally to a low point in the recession of the early 80s. Although the positions of different states in the rank order continued to fluctuate with the accelerating drop in federal aids in the mid-80s, most Northwest Area states increased their state-local tax effort, probably to compensate for lost federal funds. But the range between the highest and lowest states increased. There was increasing inconsistency of action as state and local governments struggled in the widening gap between their commitments and the total resources at their command. While none of the states returned to the mid-1970 levels of effort, the upward trend in the mid-80s in the Northwest Area ran counter to the continuing downward trend in the national average. Six Northwest states were higher; two were lower; Wisconsin was virtually unchanged.

During the same quarter-century, personal income in Northwest Area states also followed national trends--more closely than either state and local government revenues per-capita or state and local tax efforts (Figure 10). The range between the highest and lowest state personal incomes per-capita, as a percentage of the national average, actually decreased during the period. And the rank-ordering of the different states was considerably more consistent in terms of income than it was in terms of tax effort. **Thus the downward trend in state and local government tax effort and the slackening in revenue per-capita, in both the Northwest Area and the nation, since the mid-70s has run counter to the income trends.** It has been a result of fluctuations in policy, which helps to account for the wide fluctuations between the region and the nation, and between states within the region.

Local Variations

State averages mask a wider range of variation in tax effort among counties within each state (Figure 11). There is a weak tendency for the tax effort to be lower in counties containing larger cities. Average income and related tax bases are higher in those counties, and--other things being equal--a smaller share of that base is needed to provide community services. That trend is evident in most of the counties in the largest metropolitan areas of the region, and it is less strongly evident among the smaller urban centers down to the 10,000-29,000 population size class. Multnomah county (Portland) and Ramsey county (St. Paul) are noteworthy exceptions. They are relatively small in area and contain large metropolitan central cities. As a result, their costs

are high; per-capita income is depressed in the core areas; but non-residential tax bases are high. The net effect is a high tax rate per dollar of personal income--an apparent high tax effort. For each of the other large central cities, the same county contains extensive suburban areas; and it appears that comparatively high suburban incomes and lower tax efforts tend to mask the higher efforts in the central cities.

In many cases, however, there are differences among counties with similar levels of urbanization and similar economies. In some cases the difference might be explained by local industrial tax base; but most cases appear to reflect differences in local policies. For example, in South Dakota there are sharp contrasts in tax effort between the counties that include Mitchell and Huron, Brookings and Vermillion, or Belle Fourche and Sturgis on the edge of the Black Hills; in Oregon, between Eugene and Salem; Bend and Grants Pass; Klamath Falls and Pendleton; in Idaho, between Twin Falls and Caldwell; between Anaconda and Livingston, Montana; between Detroit Lakes and Alexandria, Worthington and Austin, Grand Rapids and Little Falls, Minnesota; between Chariton, Creston, and Red Oak or Grinnel, Knoxville, and Pella in Iowa.

To be sure, there are striking contrasts between counties on opposite sides of some of the state boundaries. For example, along the North Dakota-Montana line, counties on the Montana side show a markedly higher local tax effort (or burden) than adjacent counties on the North Dakota side. A weaker but similar contrast appears between counties on opposite sides of the boundaries between North Dakota and South Dakota. The differences reflect the greater local government revenues from state aids on the North Dakota side (see also Figure 14). But those differences are more than offset by higher state tax revenue in North Dakota. In general, lower state taxes tend to be offset by higher local taxes.

Additional Role of Debt

Long-term debt service adds to the revenue needs of local governments. As a percentage of personal income, debt also varies greatly among counties (Figure 12). But the geographic pattern is even more complex. In general the debt burden is highest in counties where borrowing has been heavy to meet the demands of either rapid growth or, in contrast, to meet an urgent need for redevelopment and accompanying economic incentives. Those conditions occur in counties which range across a wide variety of locations--exurban fringe of metropolitan areas, mineral boom towns, cities with large obsolescent cores, and areas depressed by changes in agriculture, manufacturing, mining, and railroading.

State and Federal Aids to Local Governments

Federal aids to combined state and local government coffers are paid mainly for health and welfare, to a smaller extent to help to cover costs of sewerage facilities, urban redevelopment, housing, parks and recreational development, education, highways, and transit. The rationale for those aids stems from the unequal ability of different states to afford basic services, and

a commitment by the wider national community to compensate at some minimum level for those differences in local wealth. To be sure, the rationale may be distorted when the national treasury is viewed as a carcass to be picked by whomever arrives first with the largest and strongest claws rather than as a limited natonal community resource to be shared on the basis of real needs.

Federal Funds to States

In the Northwest Area over the past quarter-century, federal aids to Minnesota and Iowa (and also Wisconsin) have been lower than the national average. They have been above the national average for the states to the west (Table 4). Washington is partly an exception among the western states of the Area; its receipts from federal aid programs have sometimes fallen below the national level. The level of federal aid is strongly related to differences in state average personal income, as one would expect it to be. The share of Area state and local revenue from federal aids ranged between 12 and 23 percent in 1963, rose to a peak of 21 to 30 percent in the late 1970s, and fell to 16 to 21 percent by 1984. The curve reflects the "war on poverty" and the subsequent retreat.

The combined flow of state and federal aids to local government reflects a commitment by both of those wider communities to compensate for local differences in wealth and ability to provide basic public services to all. State aids are paid mainly in support of education, welfare, and highways. They serve to allocate and relay to local units many federal payments, especially for welfare and public improvements. **The flow that finally reaches the local level depends, therefore, not only on the amount of federal money coming into the state but also on the amount that the state retains or passes through to the local units and, further, on the amount of its own revenue that the state redistributes to local units.**

As a result, the pattern of combined aids to local units looks somewhat different from the pattern of federal aid to each state (Table 5). In the early 1960s only Washington exceeded the national average of total aids to local units. By the late 1960s rising aids had shifted Minnesota above the national average and also above Washington. In the 1970s Iowa, North Dakota, and Idaho also shifted substantial local costs to the state level.

Because of federal cutbacks, the national aids to Area states in 1984 had fallen back to approximately the levels of the middle and late 1960s. But the level of aid to local communities had dropped only to the levels of the mid- or late 1970s. The differences reflected increased state aids to attempt to compensate for declines in federal programs. **All of the states have faced, in similar degree, the problem of bridging between ongoing grassroots needs or demands, on the one hand, and withdrawal of the national community from the arena, on the other hand.** Differences in policy and fiscal ability of the different states states are apparent in both Table 5 and Figure 8.

State Funds to Local Areas

The net augmentations of federal aids by the states have also varied widely (Table 6). The net aids from state to local government are equal to the amount by which total aids to local units exceed federal aids to the state. In some states, the total aids to local governments from combined federal and state sources exceed the total paid from the federal government into the state. That excess is equal to "net state aids". In other states, the total aids paid to local governments is less than the amount paid from the federal government into the state. In those cases, the state's net contribution to aids paid to local governments is negative. In other words, the state retained more of the intergovernmental flow from the federal transfers that it added from its own revenue.

In the early 1960s, at the beginning of the "War on Poverty" years, net state aids were negative in five of the eight Northwest Area states. Only Minnesota and Washington made a significant addition of state funds to the flow of intergovernmental aid payments. Through the 1960s and 1970s only Minnesota significantly increased its state contribution. Then, with federal withdrawal in the 1980s all of the states except South Dakota and Montana began to make a net augmentation to the federal funds. **Thus the initial effect of the "War on Poverty" was to increase income redistribution largely at the federal level; but the longer-term effect was to increase redistribution at the state level, as well.**

While the share of local government revenue from state aids in the 1982 census ranged between a high of 48 percent in North Dakota and a low of 36 percent in South Dakota (Figure 13), the range of variation among counties is far greater--from about 6 percent to more than 66 percent (Figure 14). Thus the policy differences among the states account for only a small part of the variations in importance of state aids among different counties. The major factor is differences in perception, from one county to another, of both total need and ability to pay.

Differences in state policy are evident in the contrasts across state lines on the map in Figure 14. For example, counties with similar local tax bases and income levels receive far less in state aids in South Dakota than the adjoining counties in North Dakota or Minnesota. Similar contrasts occur across the boundaries between Iowa and Minnesota, Montana and North Dakota, or Montana and Idaho. Within the states there is a tendency for state aids to account for a higher share of revenue in rural counties, with lower average income and tax base, and a lower share in urban counties, with higher income and tax base. The tendency is strongest in Oregon, Idaho, North Dakota, and South Dakota. Virtually all of the metropolitan counties and most other urban counties in those states are well below the Area average share; while a large majority of rural counties are well above the average. In Washington and Minnesota, with relatively large state aid programs, the share of local revenue from those aids is relatively high in all types of counties; and in Montana and Iowa it is relatively low in most counties regardless of their degree of urbanization.

Contributors, Beneficiaries, and Efficiency

Local governments in some areas receive more from the total reservoir of state aid funds than they put into it through state taxes. Others put in more than they receive. Thus there are net gains in some counties, net deficits in others. The map in Figure 15 shows the pattern of estimated net shifts. **There is generally a strong tendency for urban and higher income counties to be net contributors to the state aid pools and lower income counties to be net beneficiaries.** Eighty-five percent of all metropolitan counties are net contributors. Nearly three-quarters of all non-metro urban counties are net contributors or neutral. The half dozen urban counties with relatively large net gains from state aids are all in Minnesota, and five of those are in the northeastern forest region of the state. The few counties with both high income and high net gain from state aids are in Washington, especially in counties dominated by an unstable timber economy. **For the most part the state aid programs appear to move funds from the areas with greater wealth to those with less, although there are numerous exceptions.**

In counties which are net contributors to the state aid system, there is no fiscal need for the state to pay aids, because those counties are already raising the equivalent of the aids they receive from their own funds. The state collects money for the state aid central fund then returns a substantial portion of what it collected to the same counties in which the money originated. To accomplish the fiscal purpose of the aid programs, it should only be necessary for the state to raise and transfer an amount equal to the net gains of the beneficiary counties. The rest of the collections and payments appear to be circular and inefficient. The net transfer of funds to beneficiary counties is only a small percentage of total state aid payments to all counties. That percentage provides a measure of the efficiency of the state aid system.

The efficiency of the state aid systems in all Northwest Area states appears to be quite low (Figure 16). South Dakota's state aid system, though smallest in the Area, appears to redistribute the highest share of the total funds; and that was only 17 percent in the 1982 census year. **It appears that the amount of money taxed and redistributed through the state aid programs may be roughly six to ten times as much as necessary to accomplish the fiscal goals. The rest of the flow of funds may well be a political necessity but not a fiscal necessity.**

<u>Effect of Federal and State Employment</u>

State employment is also a significant factor in the geographic redistribution of income (Figure 17). For the Northwest Area as a whole, the share of total state jobs outside the high-order metropolitan areas is perhaps 50 percent greater than the share of total population. However, those state jobs tend to be concentrated in the low-order metropolitan areas and the counties of non-metropolitan urban centers of more than 10,000 population. The best-known examples are the universities, junior colleges, technical institutes, and other institutions located in smaller cities. In other words, state employment locations have been important in the creation of "growth centers" outside the major national concentrations at the Twin Cities, Seattle-Tacoma, and Portland. In the Area's four eastern states, the relative importance of state employment is negligible in half of the rural counties, and it obviously has not been

enough to create urban centers in the other half. In the four western, because the counties are larger, there is a greater likelihood of a growth center in any county.

Although we have not calculated the magnitudes, the maps make it clear that the concentration of state employment tends to increase the income and tax base in those growth centers and thus to reduce the net flow of state aid funds to them. In some cases--notably the small-city capitals and university towns--the effect has been great enough to make those centers contributors rather than beneficiaries in the state aid system. **Although the states have never had an explicit growth center policy, the accumulation of historical decisions about locations of state institutions has had the same effect as a policy. Closer study of the role of the states in the development of the medium-size centers in the Area's urban system might provide an understanding of both the possibilities and the political and fiscal constraints of a broader and more deliberate growth center policy in the future.**

Federal civilian employment is more geographically dispersed than the pattern of state jobs; but it also tends to reinforce the growth-center pattern of state employment (Figure 18). Federal employment is an important part of today's ubiquitous county seat bureaucracy, especially in the west. It accounts for more than five percent of all jobs--including farm jobs--in virtually all of the small counties of the sparsely-settled plains and even large counties of the mountain and desert areas. In counties with major concentrations of Indian population, the percentage is much higher. But federal jobs also account for more than five percent of the total employment in more than a dozen low-order metropolitan areas, with payrolls that include military bases, natural resource management headquarters, atomic energy faciltiies, and research centers. More than forty urban or metropolitan counties are in either the highest or second highest categories of employment concentration on the maps of both state and federal civilian employment (Figures 17, 18).

STATE AND LOCAL PUBLIC EXPENDITURES

State and local governments spend roughly two-thirds of their total revenue, including federal aids, in four broad categories--education, highways, welfare (more than half of that for medicaid), and health and hospitals (Table 7, Figures 19, 20). The remaining one-third is spread over a large number of other classes of spending. Local sewer, water, and liquor retailing, policy, and fire protection account typically for about one-eighth of the total expenditures; employee pensions and unemployment compensation account for another one-twentieth; natural resources, parks and recreation, housing and renewal, combined, account for less than one-thirtieth of the total; and so do general administration and accounting. Debt retirement and interest are included in these expenditure classes; those items make up about one-tenth of the total budgets. Of course, some of these expenditure categories are also important generators of revneue--highways through gasoline and motor vehicle taxes, utilities and liquor stores through direct charges.

Except for Idaho and South Dakota, all Northwest Area states spend more than the national average per-capita on education and highways. The attention to education reflects culture, traditions, attitudes. The highway

budgets reflect mainly the relatively low population densities and resulting large highway mileage per-capita needed to tie together the settlements and resources of this part of the country. Minnesota, like Wisconsin, spends above the national average per-capita on welfare, and health-hospital expenditures in Minnesota and Iowa exceed the national average. All of the other states in the Area are below average. The differences between the states are partly related to income levels; but more than that they reflect different legislative and public policies.

Northwest Area states also spend at or above the national average per dollar of personal income on education and highways; all but Idaho are above the national level in welfare spending compared with personal income (Figure 21). Those figures reflect the combination of strong state and local effort and the effect of federal aids compensating for differences among the states in wealth and tax base.

Because of major differences between the states in both the amount of state aids and the degree of centralization or decentralization of accounting, the map patterns of reported local expenditures appear somewhat chaotic.

In general, education expenditures per dollar of personal income (effort, or burden, according to one's choice of terms) tend to be inversely related to income--high in low-income counties, low in high income counties (Figure 22). Of course, even with high local effort and state aids, per-pupil expenditures may fall below average in the poorest counties. Counties which include major Indian populations in North and South Dakota are the most notable cases; they are in the highest category of education expenditures per dollar of income and lowest in personal income per-capita. Counties with both low income and low effort are confined to fewer than a dozen cases in Idaho and South Dakota.

Highway expenditures per dollar of personal income also tend to be generally lower in the most urbanized counties, reflecting both their greater wealth and the greater cost-effectiveness of their road networks because of higher population densities (Figure 23).

The map of local welfare expenditures per dollar of personal income reflects most dramatically the effects of different state policies (Figure 24). Minnesota stands out because of both its high level of expenditure and the high degree of decentralization through county-run agencies. The other states have sharply lower expenditure rates. In addition, Washington's distribution system is highly centralized, and county expenditures are very low.

SUMMARY

State and local public revenues and expenditures in the North West Area tend to follow national trends and averages. But the Area values also depart significantly from the national values. Furthermore, they differ from one another more than they do from the national norms; and counties within each state differ more from one another than each state differs from its neighboring states.

The geographical pattern of revenue and expenditure partly reflects differences in personal income, wealth, and thus in tax base, among the government jurisdictions. Inequality of tax bases, in turn, reflects the different location of each jurisdiction in the seamless national and global patterns of resources, settlement, and accessibility--not only today's location but also past positions that account for today's legacy of structures and attitudes. The revenue and expenditure patterns reflect, in turn, varying efforts of the state and national communities to compensate for differences in the ability of different people and places to pay for basic public services. State and federal employment locations augment and further complicate the effects of intergovernmental revenue transfers.

While this profile from readily available census data indicates the complexity of the patterns, it falls far short of adequately detailed description. And, while the patterns, themselves, suggest explanations, most of the differences in state and local policies remain unexplained. Meanwhile, the conflicts over policies continue in each state and in many local units. Selected and partial comparisons between states and cities are invoked again and again in public debate on taxation and public expenditures. Yet there is no broad matrix in which to place the piecemeal data, no understanding of just why and how much--in what combinations and categories of policy, revenue, and expenditures--the states and localities differ.

Some of the maps in this profile also suggest that government--historically and presently--plays an important role in the decentralization of economic development. Discussions of economic development focus persistently on public policy which might, could, or should be formulated and tried in order to distribute investment or growth. Meanwhile, there is little or no analysis to show the effect of state and federal spending policies on the existing pattern of population and settlement.

APPENDIX A

TABLES 1-7

	Per capita Mean 1970, 1980, 1984	Per capita 1984	Aggregate, 1984 (millions)
Washington	11,981	13,306	57,868
Oregon	11,149	12,011	32,117
Idaho	9,530	10,530	10,541
Montana	9,923	10,838	8,931
North Dakota	10,105	11,629	7,977
South Dakota	9,372	10,790	7,617
Minnesota	11,641	13,385	55,708
Iowa	10,975	12,087	35,173
Wisconsin	11,126	12,597	60,037
All U.S. States	11,237	13,114	3,096,976

Table 1. Personal Income in Northwest Area states, Wisconsin, and all U.S. states, in constant 1984 dollars. Source: *Statistical Abstract of the United States (SAUS)* 1987, Table 714, p. 425 (1984); *SAUS 1981*, Table 715, p. 429 (1970, 1980).

	Original Source			Final Recipient		(F=E-C)	(G=B-D)	(H=F-G)
	(A) U.S.	(B) State	(C) Local	(D) State	(E) Local	Net Aids to Local	Net Aids fr State	Net Aids fr Fed.
Washington	1,614	5,377	3,309	4,312	5,987	2,678	1,065	1,613
Oregon	1,268	2,835	2,501	2,756	3,348	1,347	79	1,268
Idaho	364	881	525	818	952	427	63	364
Montana	447	846	847	952	1,188	341	-106	341
North Dakota	376	1,062	411	1,062	788	377	0	377
South Dakota	360	602	603	743	823	220	-141	220
Minnesota	928	6,179	4,073	4,986	7,195	3,122	1,193	1,929
Iowa	1,047	2,825	2,346	2,448	3,769	1,423	377	1,046
Wisconsin	2,020	6,129	3,630	4,971	6,809	3,179	1,158	2,021
All U.S. States	97,052	249,290	196,504	224,921	317,926	121,422	24,369	97,053

Table 2. Gross flow of funds to state and local governments through the governmental revenue system, in millions of 1984 dollars. Source: *SAUS 1987*, Table 441, p. 259.

	Income Taxes		Sales Taxes	Motor Vehicle Taxes	All Other Taxes	Charges, Royalties
	Individual	Corporate				
Washington	0	0	64	2	18	15
Oregon	43	14	8	5	5	25
Idaho	26	3	41	4	4	22
Montana	20	4	16	3	26	31
North Dakota	7	4	29	3	21	36
South Dakota	0	3	48	3	6	40
Minnesota	37	5	33	3	3	18
Iowa	28	5	38	5	4	21
Wisconsin	36	6	34	2	5	17
All U.S. States	24	6	38	3	8	21

Table 3. Major sources of state revenue, 1984, as a percentage of the total. Total percentages vary slightly from 100 due to rounding. Sources: *SAUS, 1987*, Table 447, pp. 264-265 (charges and royalties); SAUS 1986, Table 463, p. 280 (other categories)

	1963	1966	1969	1972	1975	1978	1981	1984
U.S.	14	16	17	19	21	22	21	18
Washington	15	15	16	18	21	20	24	16
Oregon	19	22	20	24	27	26	22	19
Idaho	21	20	20	24	25	26	25	21
Montana	23	25	23	27	26	30	27	21
North Dakota	18	18	18	22	21	25	20	20
South Dakota	19	22	23	22	28	28	28	23
Minnesota	12	16	15	16	20	20	21	16
Iowa	12	14	14	14	20	21	19	17
Wisconsin	11	10	13	14	18	20	21	17

Table 4. Percentage of combined state and local revenue from federal government payments. Source: same as Table 2.

	1963	1966	1969	1972	1975	1978	1981	1984
U.S.	31	32	35	36	41	43	43	39
Washington	42	40	41	38	39	42	47	45
Oregon	25	31	30	30	39	42	37	34
Idaho	26	31	31	35	46	42	47	44
Montana	17	22	20	23	33	39	33	29
North Dakota	23	25	26	34	43	42	43	49
South Dakota	12	12	17	21	29	29	33	26
Minnesota	29	32	45	46	51	52	50	44
Iowa	17	21	29	31	42	44	44	43
Wisconsin	43	44	42	42	51	52	50	47

Table 5. Percentage of local revenue from state and federal aids. Source: same as Table 2.

	1963	1966	1969	1972	1975	1978	1981	1984
U.S.	6	5	5	3	5	4	4	5
Washington	9	4	6	2	1	3	4	10
Oregon	-4	-5	-2	-6	-4	-1	-1	1
Idaho	-7	-4	-4	-7	-2	-5	0	4
Montana	-13	-14	-13	-15	-8	-8	-11	-7
North Dakota	-7	-6	-6	-6	-4	-6	-2	0
South Dakota	-13	-15	-14	-11	-13	-14	-12	-8
Minnesota	8	4	14	14	12	12	10	10
Iowa	0	-2	3	5	6	6	5	6
Wisconsin	23	21	16	14	15	12	9	10

Table 6. Net aids from state to local governments, 1984. "Net aids" equal payments from state to local units, in excess of federal aids to the state. The "net aids" represent a net augmentation of federal funds from the state's own funds in the stream of aids to local units (see Table 2). Where the "net aids" value is negative, transfers from the federal government into the state exceeded all transfers to local governments in that state. Source: same as Table 2.

	Education	Highways	Welfare	Health-Hospitals	All Other
U.S	176,108 (745)	39,419 (167)	64,709 (274)	46,419 (196)	176,720 (747)
Washington	3,637 (836)	897 (206)	1,020 (235)	774 (178)	3,561 (819)
Oregon	2,411 (901)	482 (180)	486 (182)	408 (152)	2,586 (966)
Idaho	637 (638)	216 (216)	135 (135)	176 (176)	548 (548)
Montana	755 (917)	266 (323)	185 (224)	108 (131)	645 (784)
North Dakota	637 (927)	240 (349)	149 (217)	88 (128)	577 (840)
South Dakota	497 (705)	232 (329)	133 (187)	70 (99)	475 (674)
Minnesota	3,717 (893)	1,092 (262)	1,644 (395)	895 (215)	3,518 (845)
Iowa	2,456 (846)	832 (287)	750 (258)	634 (218)	1,566 (539)
Wisconsin	4,305 (904)	1,030 (216)	1,679 (353)	909 (191)	3,322 (698)

Table 7. Combined state and local expenditures, in millions of dollars, in major categories, 1984. Per capita rates, in dollars, shown in parentheses. Source: *SAUS 1987*, Table 442, pp. 260-261, and Table 447, pp. 264-265.

APPENDIX B

FIGURES 1-24

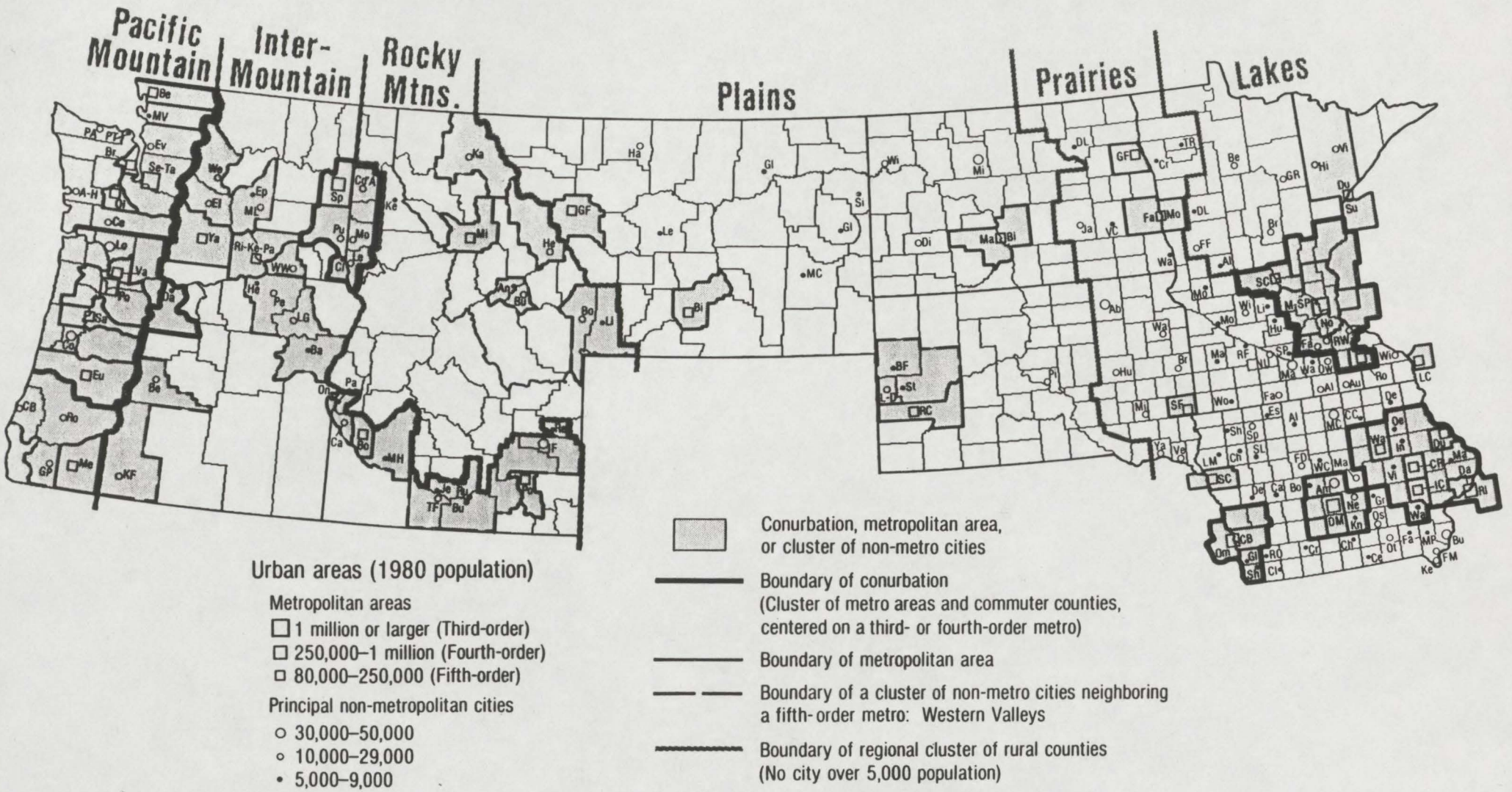

Figure 1. Northwest Area counties grouped according to intensity of urbanization and major land use regions. For background see J. R. Borchert and W. J. Craig, A Census-Geographical Profile of the Northwest Area, report to the Northwest Area Foundation, University of Minnesota Department of Geography and Center for Urban and Regional Affairs, June 1987.

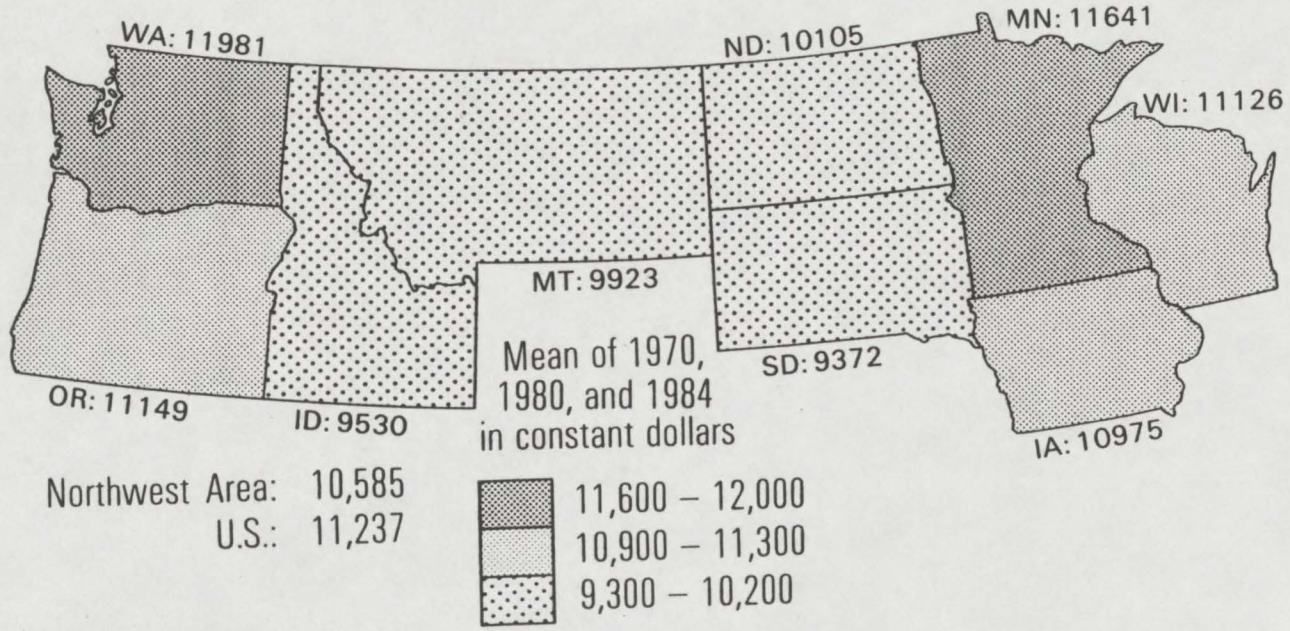

Figure 2. State Personal Income Per Capita. The 1970-80-84 means tend to smooth the effects of recent or short-term fluctuations and reflect longer-term average incomes on which revenue expectations, community demands, and tax policies might logically rest. Incomes are expressed in 1984 dollars. Source: same as Table 1.

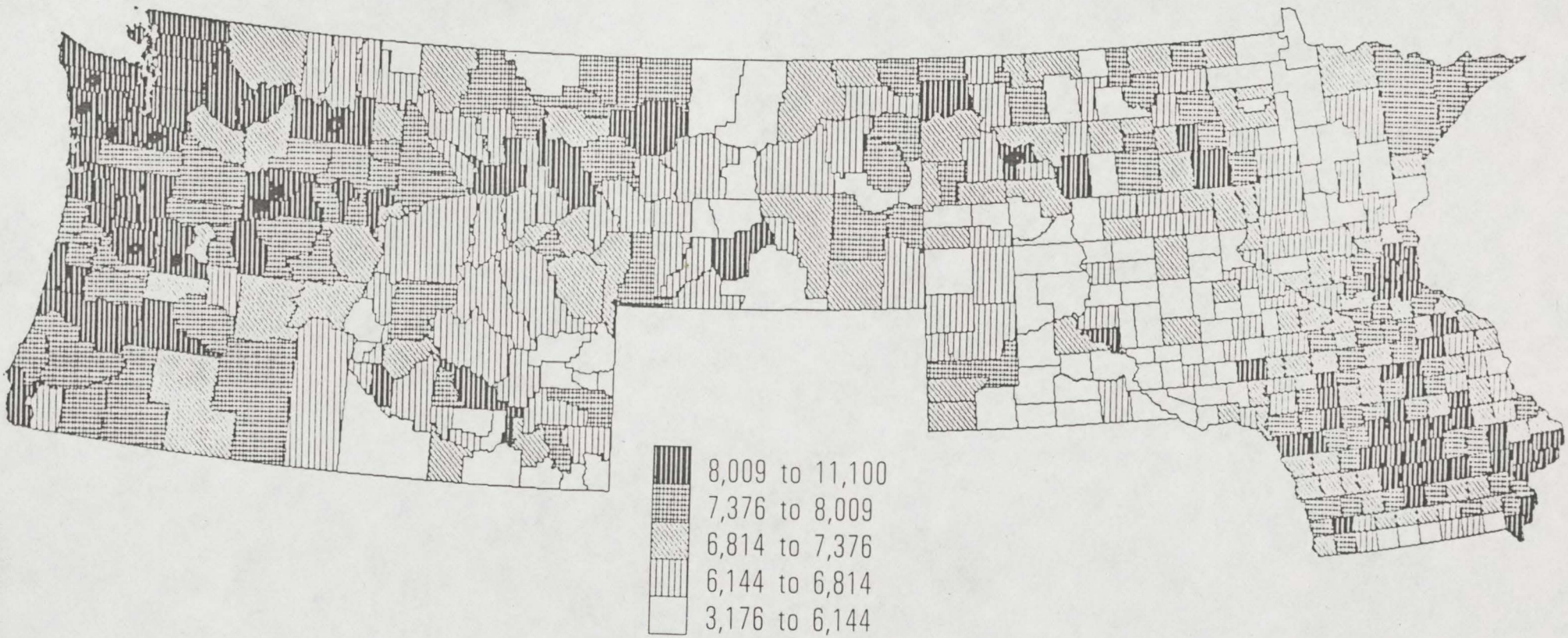

Figure 3. County Personal Income Per Capita. Like those in Figure 2, the values are means of 1970, 1980, and 1984, expressed in 1984 dollars. Source: U. S. Census of Population (1980).

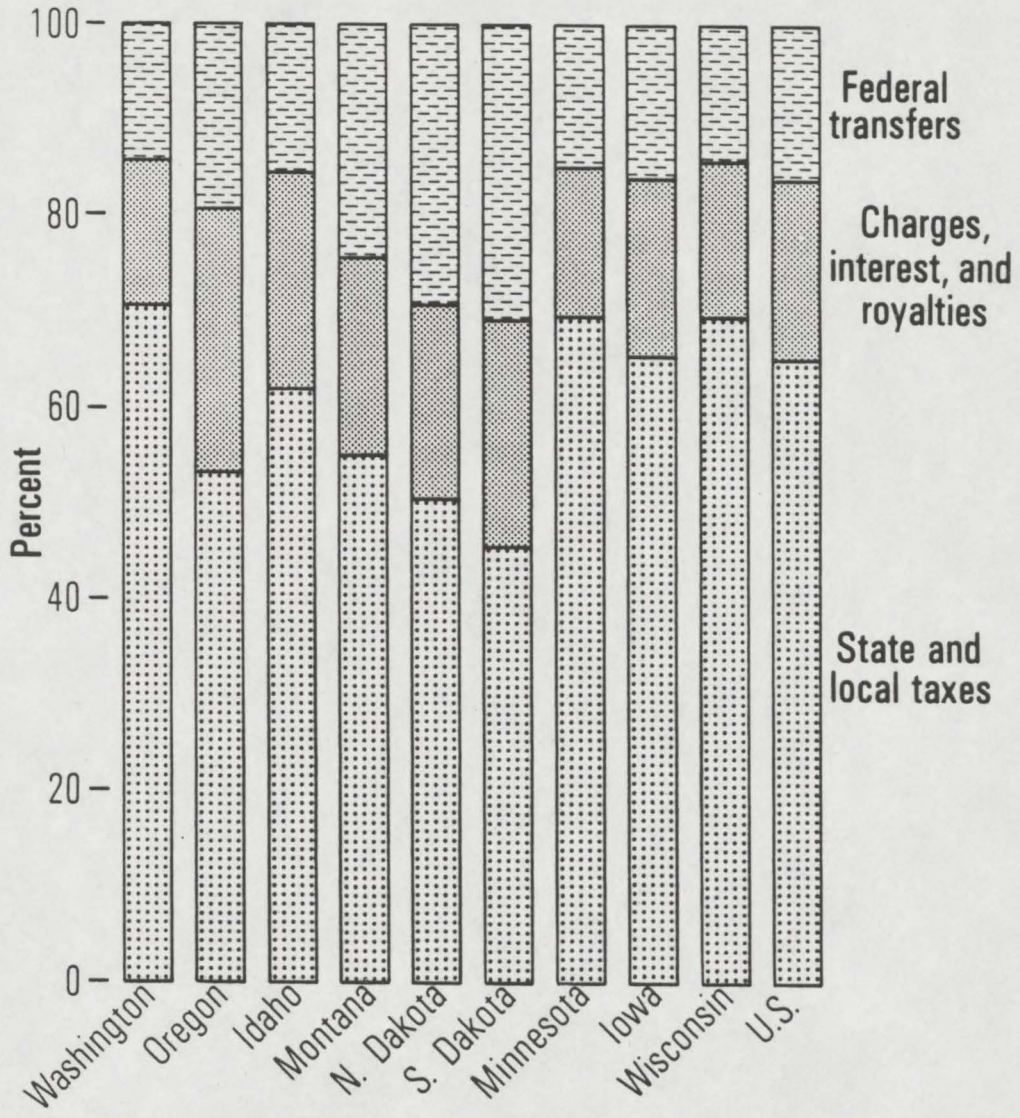

Figure 4. Percentages of state and local government revenues from major sources, 1984. Source: same as Table 3.

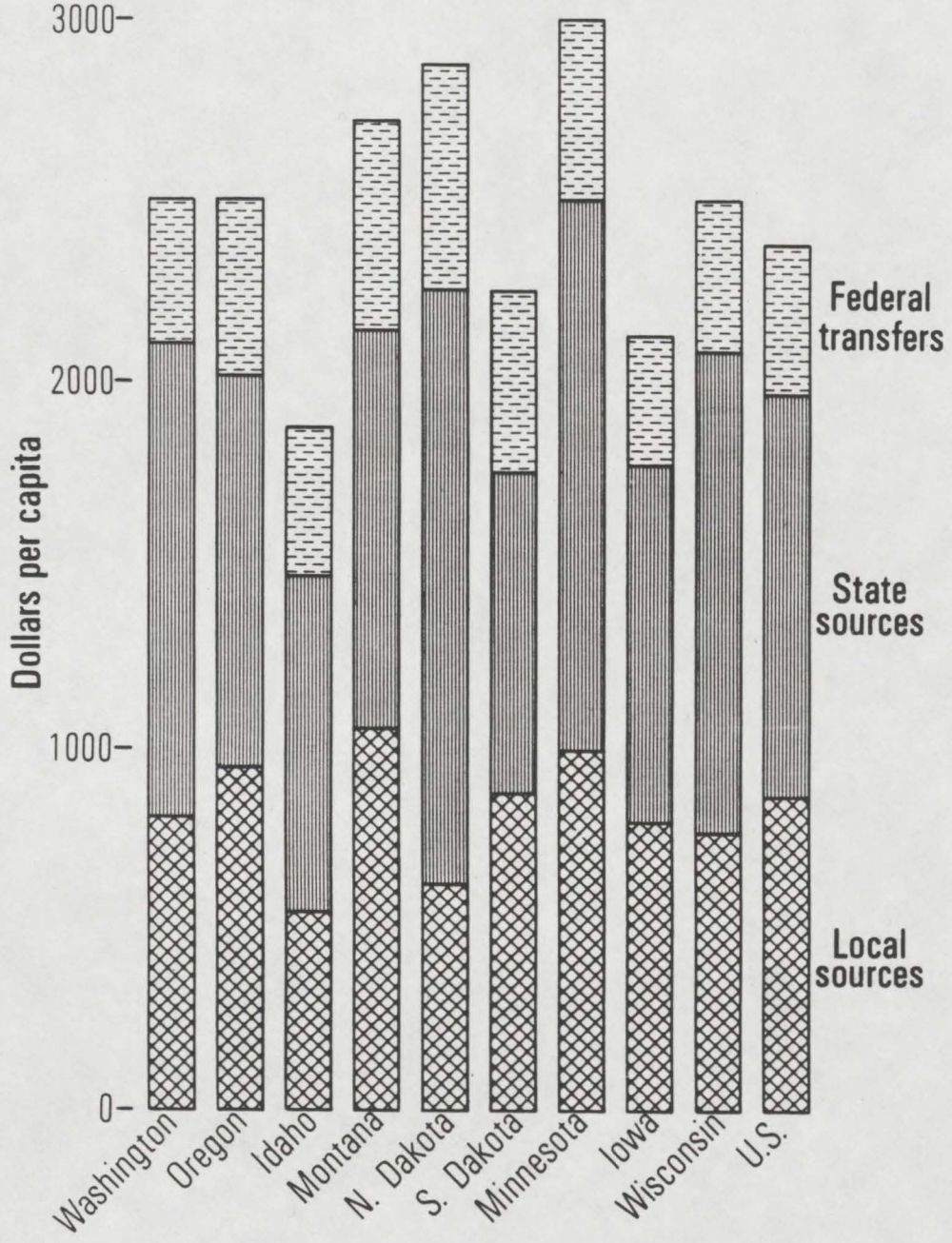

Figure 5. State and local government revenues per capita from major sources, 1984.
Source: same as Table 2.

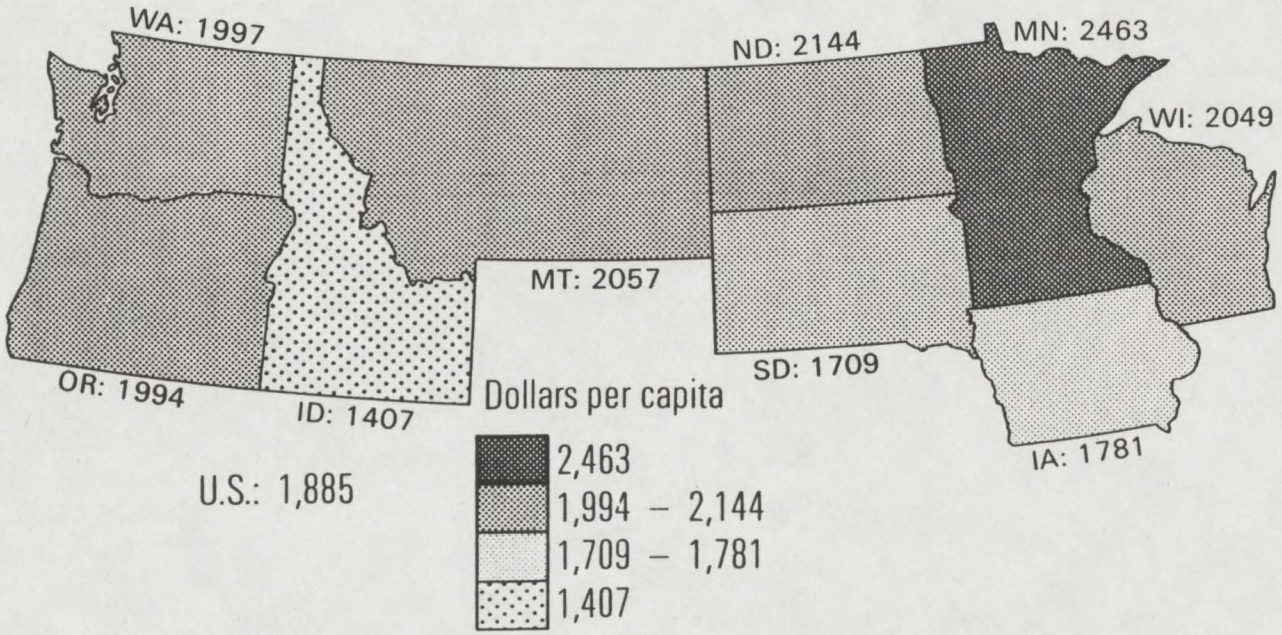

Figure 6. State and local government revenues from own sources, 1984. Source: same as Table 2.

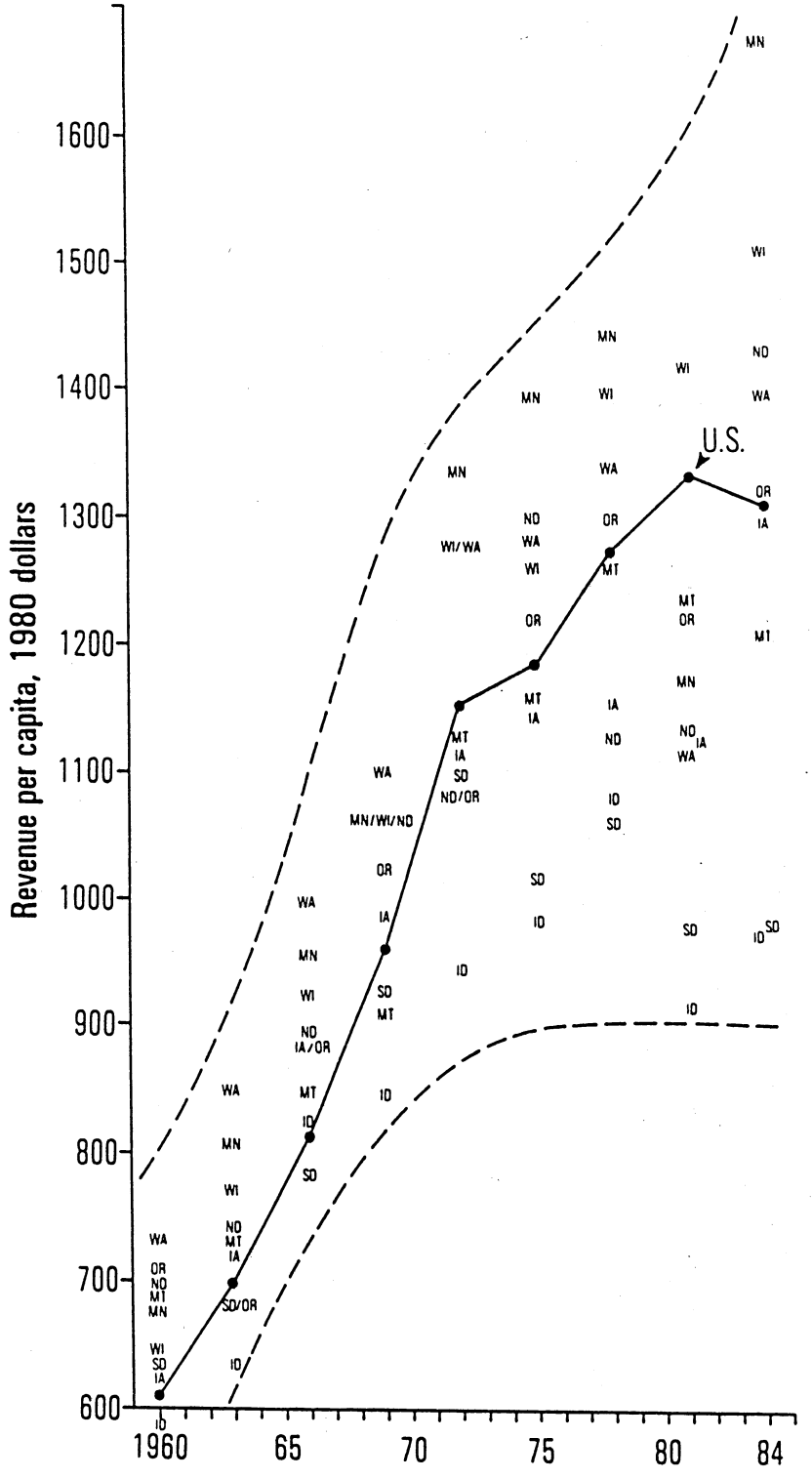

Figure 7. Trends in state and local government revenue per capita, from own sources, in constant 1980 dollars, for three-year time intervals, 1960-1984. Solid line shows the national trend. Initials indicate the positions of Northwest Area states and Wisconsin. Comparisons among different years show the fluctuating positions of the states relative to one another and to the national average. Dashed lines enclose the widening band of performance occupied by Northwest Area states during the quarter-century. Note that the vertical axis of the graph is truncated at the base. Sources: Tables in Statistical Abstract of the United States, 1987, 1984, 1980, 1977, 1974, 1971, 1967, 1963.

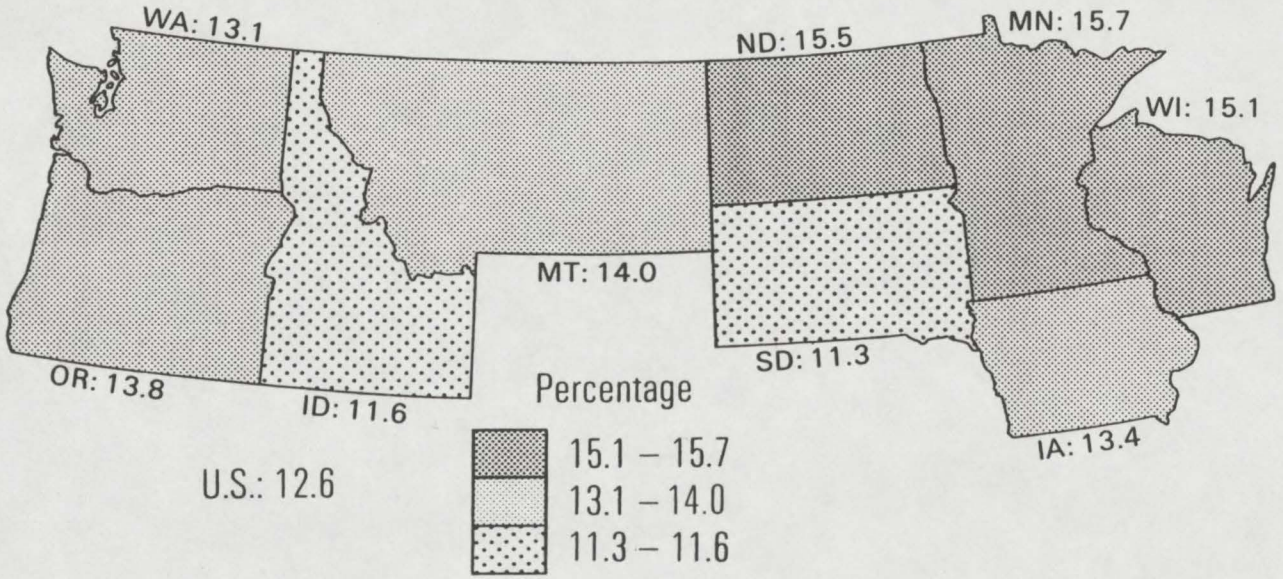

Figure 8. State and local government revenues from own sources as a percentage of state total personal income, 1984. Sources: same as Tables 1, 2.

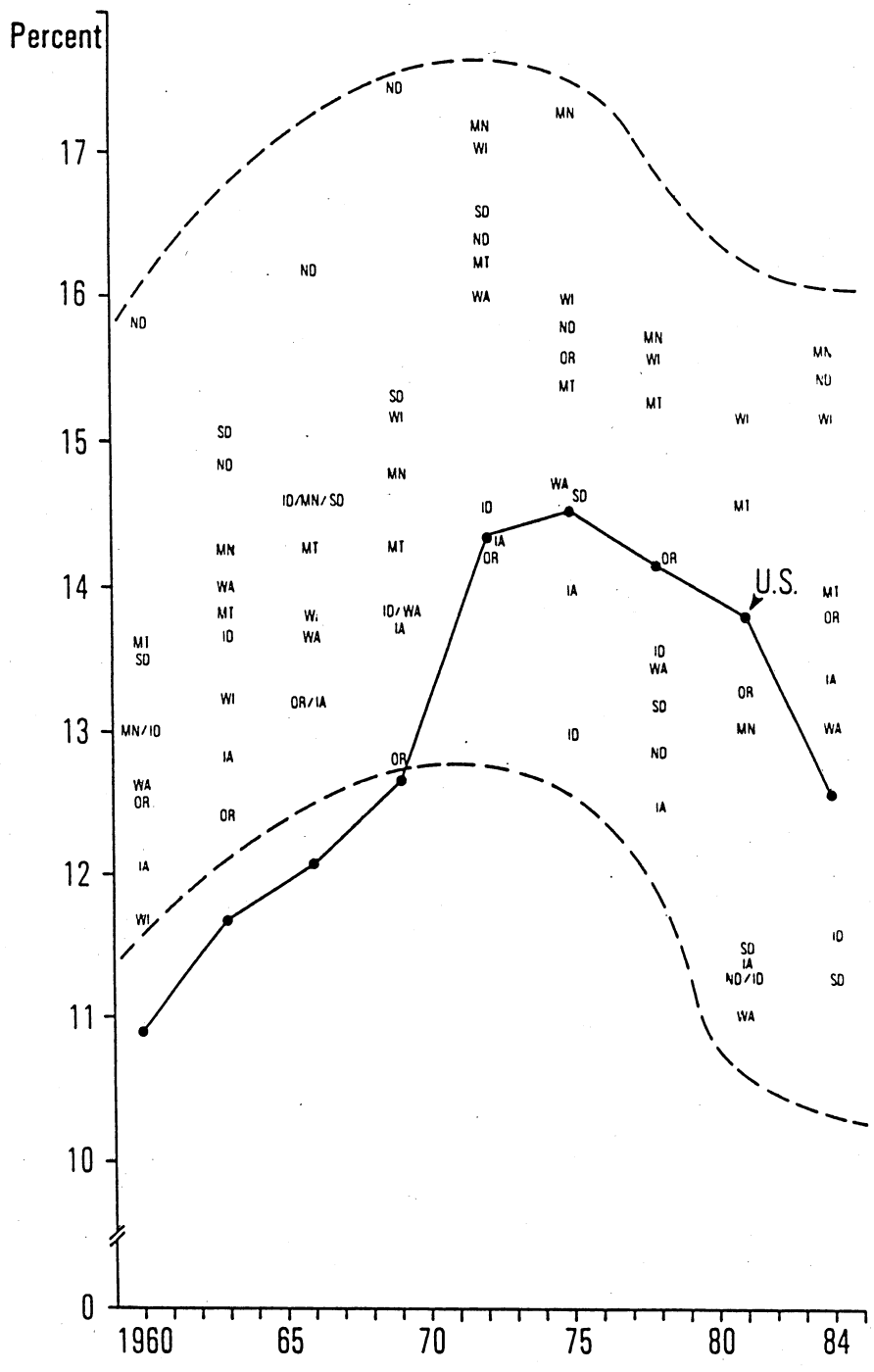

Figure 9. Trends in state and local government revenue from own sources as a percentage of state total personal income, for three-year time intervals, 1960-1984. Solid line shows national trend. Initials indicate the positions of Northwest Area states and Wisconsin. Comparisons among different years show the fluctuating tax "efforts", or "burdens", of states relative to one another and to the national average. Dashed lines enclose the band of performance occupied by Northwest Area states during the quarter-century. Sources: same as Table 7.

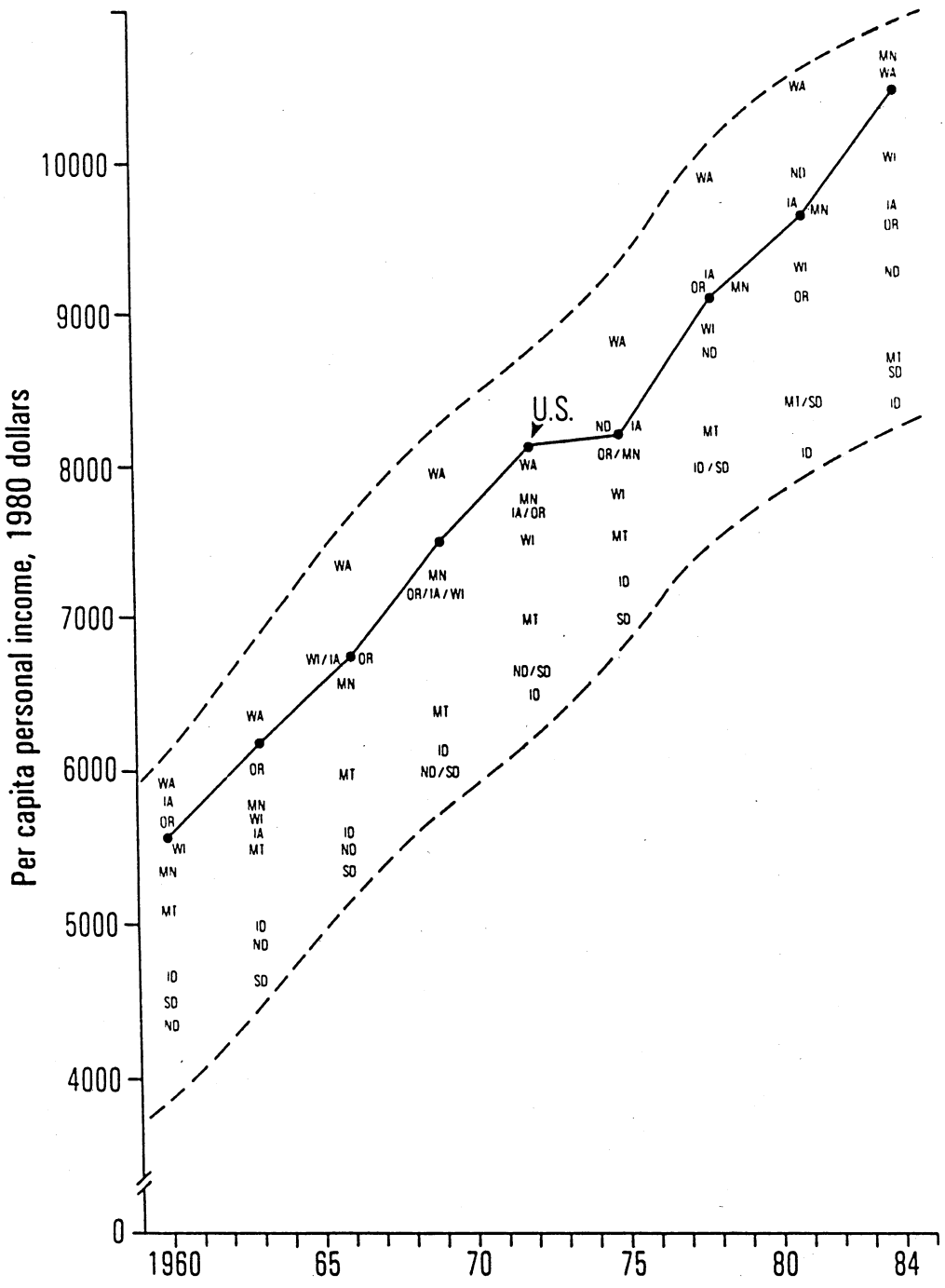

Figure 10. Trends in personal income per capita in constant 1980 dollars, for three-year time intervals, 1960-1984. Solid line shows the national trend. Initials indicate the positions of Northwest Area states and Wisconsin. Dashed lines enclose the band of performance occupied by Northwest Area states and Wisconsin during the quarter-century. There was a strong tendency for states to hold persistent positions near the national average or near the high or low edges of the Northwest Area band throughout the period. North Dakota showed the greatest variability and net gain. Shifts in rank resulted from income differences that were relatively small compared with the overall gains shown in all of the states. Sources: same as Table 7.

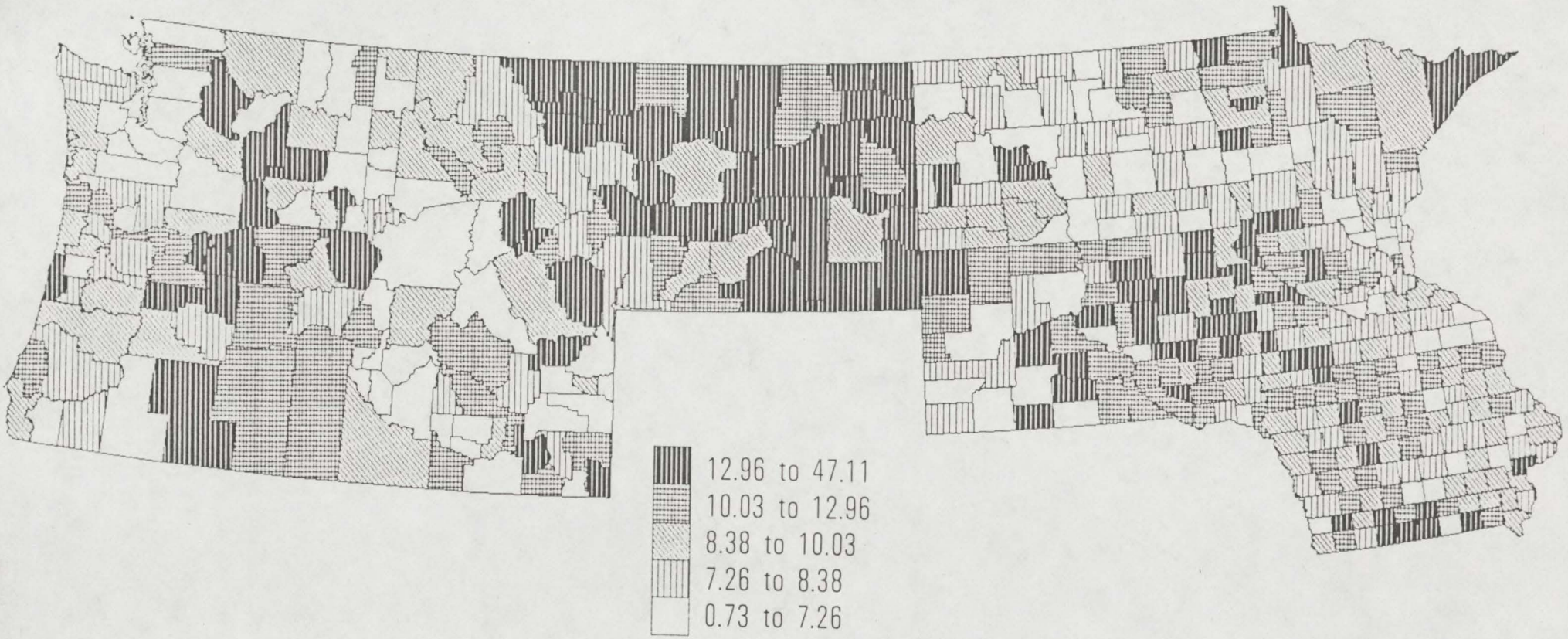

Figure 11. 1982 revenue of local government units within each county as a percentage of average personal income in the county for 1970, 1980, and 1984. Source: U. S. Census of Governments (1982), and U. S. Census of Population.

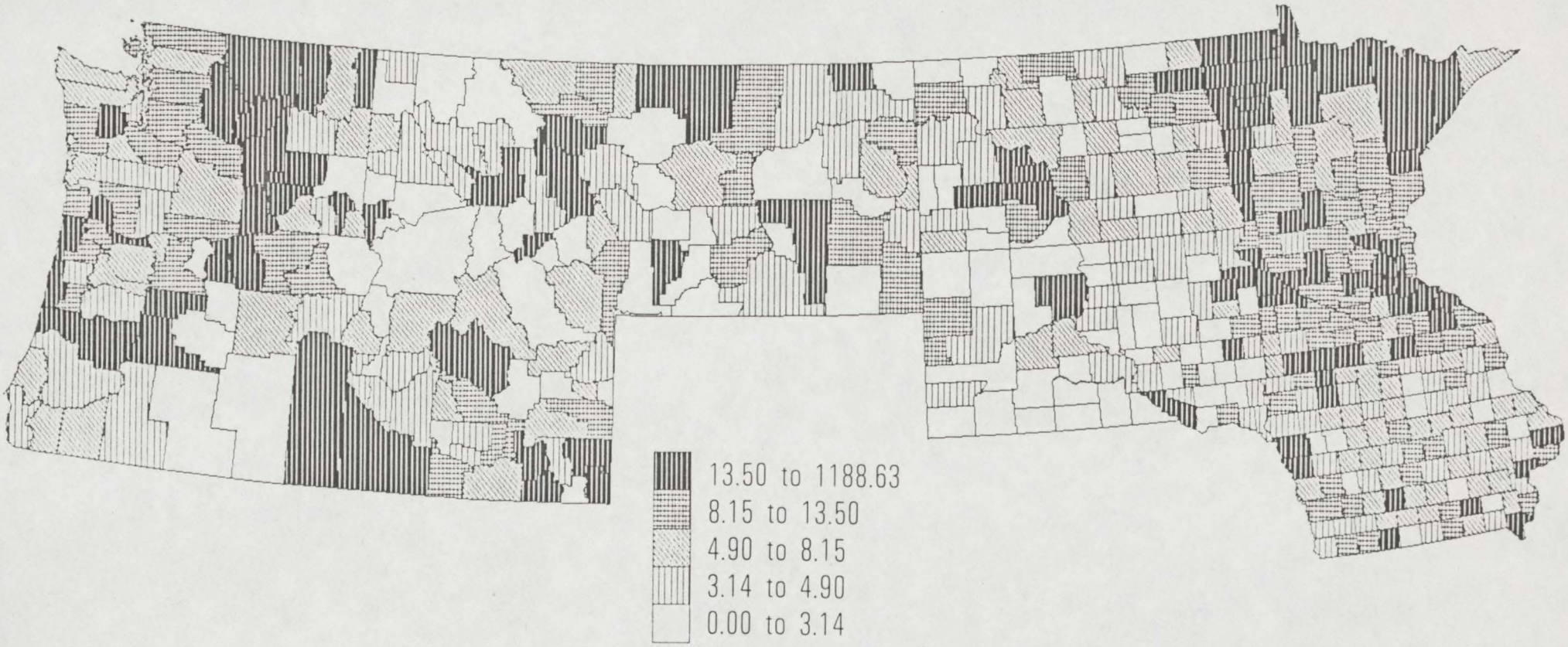

Figure 12. Total long-term debt of local government units in each county as a percentage of personal income in the county, 1982. Source: U. S. Census of Governments (1982).

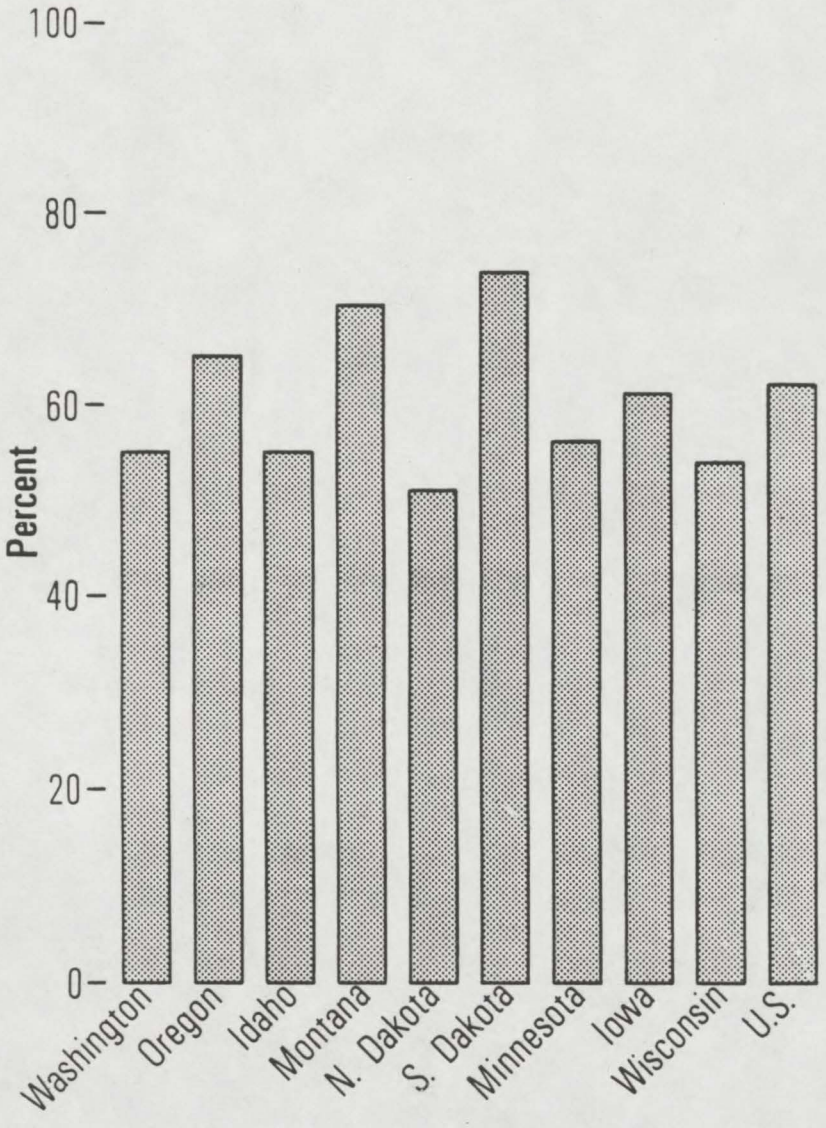

Figure 13. Bars indicate the share of total local government revenues which came from local (own) sources in 1984. The remainder of local government revenues in each state came from state and federal aids. Source: same as Table 2.

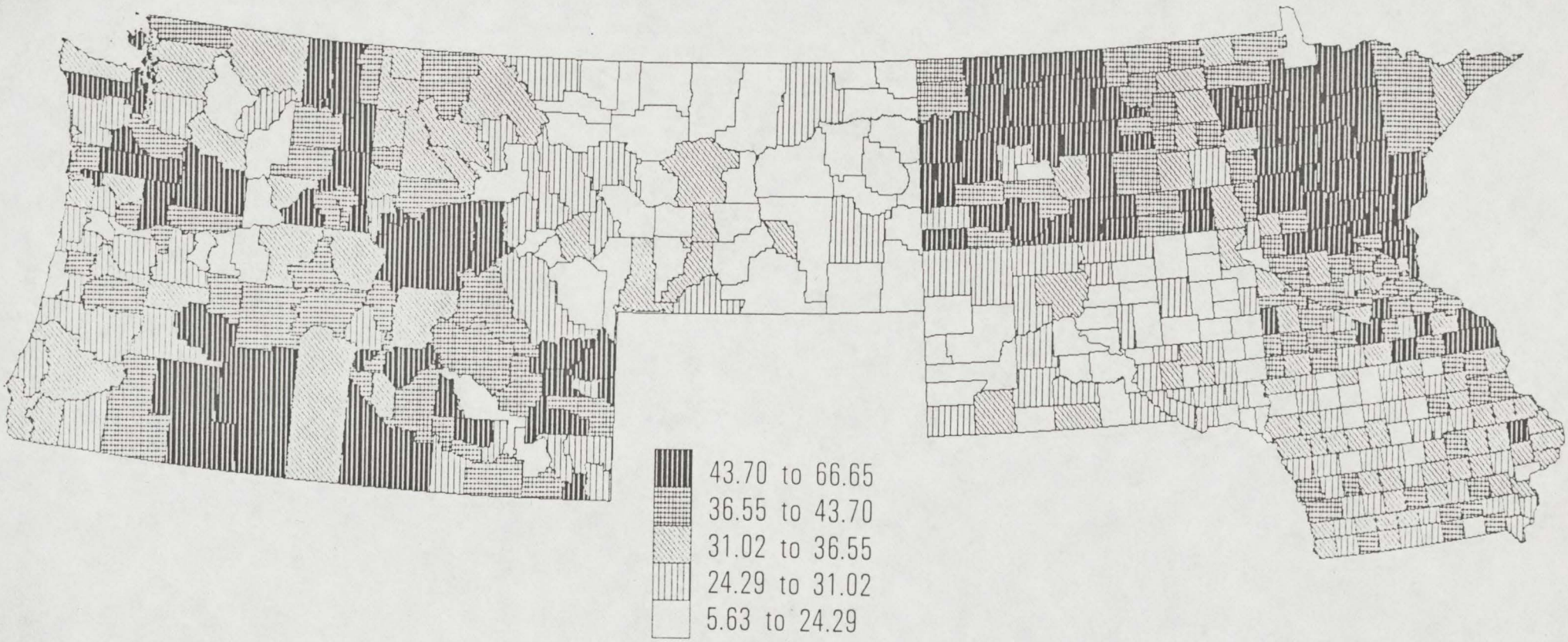

Figure 14. Percentage of local government revenue from state aids in each county, 1982. Federal aids paid directly to local units are not included, although state aids included federal money paid to the states and passed on to local governments. Source: U. S. Census of Governments (1982).

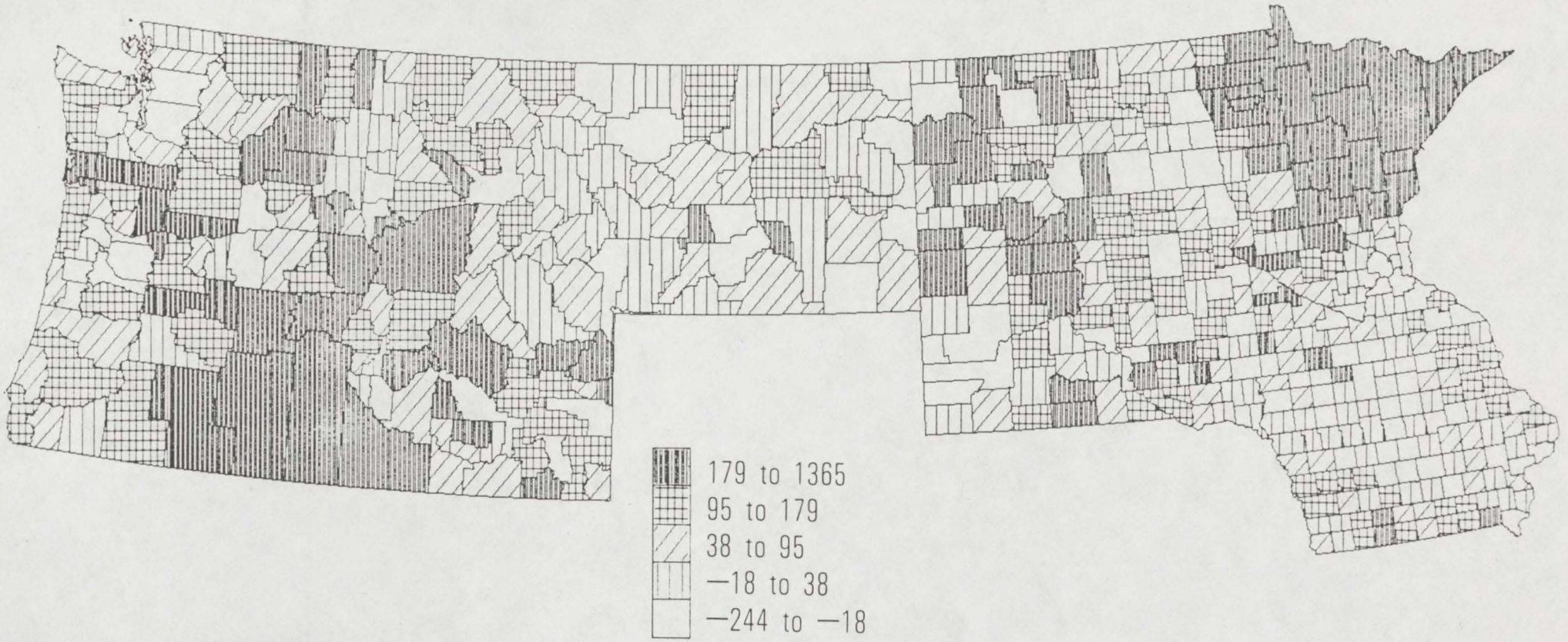

Figure 15. Estimated net benefits or costs of state aid programs, per capita, in each county, 1982. Sources: State aid payments from U. S. Census of Governments. The total fund collected for state aids was assumed to be the sum of all state aids paid. Each county's contribution to the total fund was assumed to be proportional to that county's share of total state personal income. If payments from the fund exceeded payments to it, the difference was taken as the net benefit of local government units in that county from state aid payments. If payments to the fund exceeded payments from it, the difference was taken as the net cost of the program to county residents. Because payments from each county into the state's treasury are not perfectly correlated with personal income, the figures in this map are indicative but not definitive. (For the degree of both broad persistence and local variation in these patterns in different years, see J. R. Borchert, Taxes and the Minnesota Community, University of Minnesota Center for Urban and Regional Affairs, 1979, pp. 27-28, Figures 44, 45.)

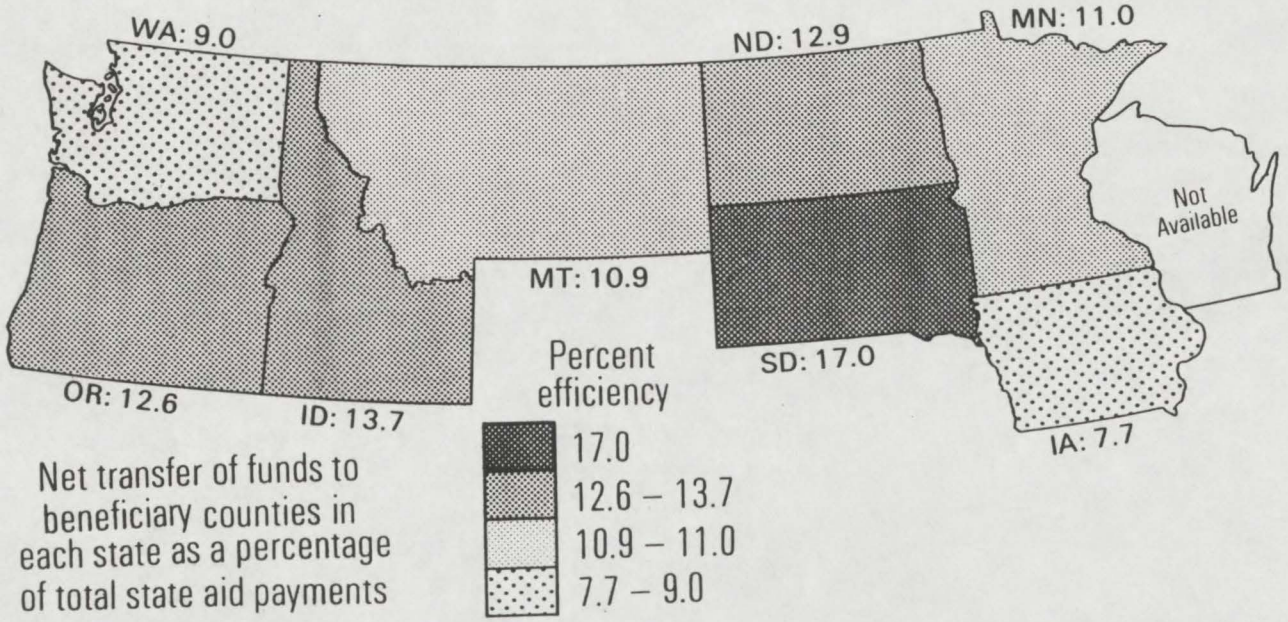

Figure 16. Estimated "efficiency" of state aids: net transfer to beneficiary counties in each state as a percentage of total state aid payments, 1982. See text, page 9-10. Source: calculated from data for Figure 15.

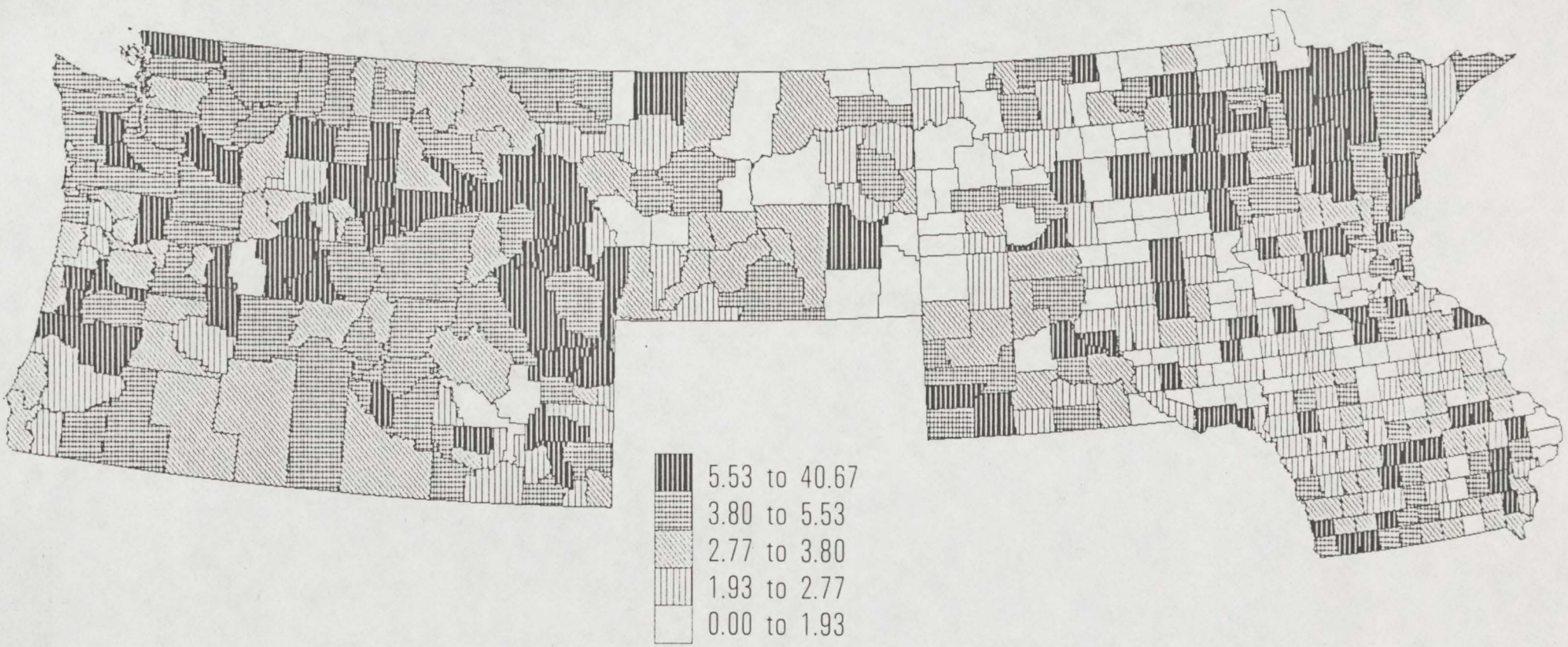

Figure 17. State employment as a percentage of total civilian employment, including agriculture, 1980. Source: U. S. Census of Population (1980).

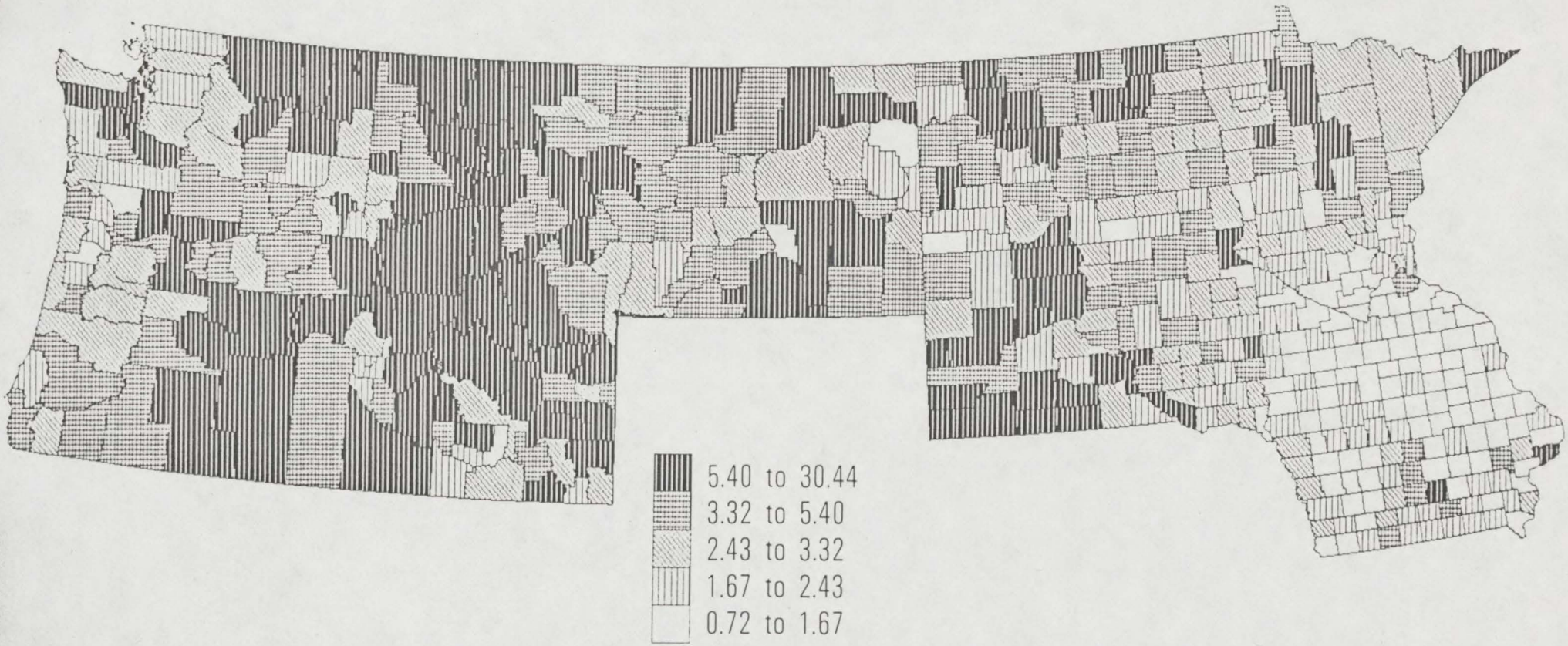

Figure 18. Federal civilian employment as a percentage of total civilian employment, including agriculture, 1980. Source: U. S. Census of Population (1980).

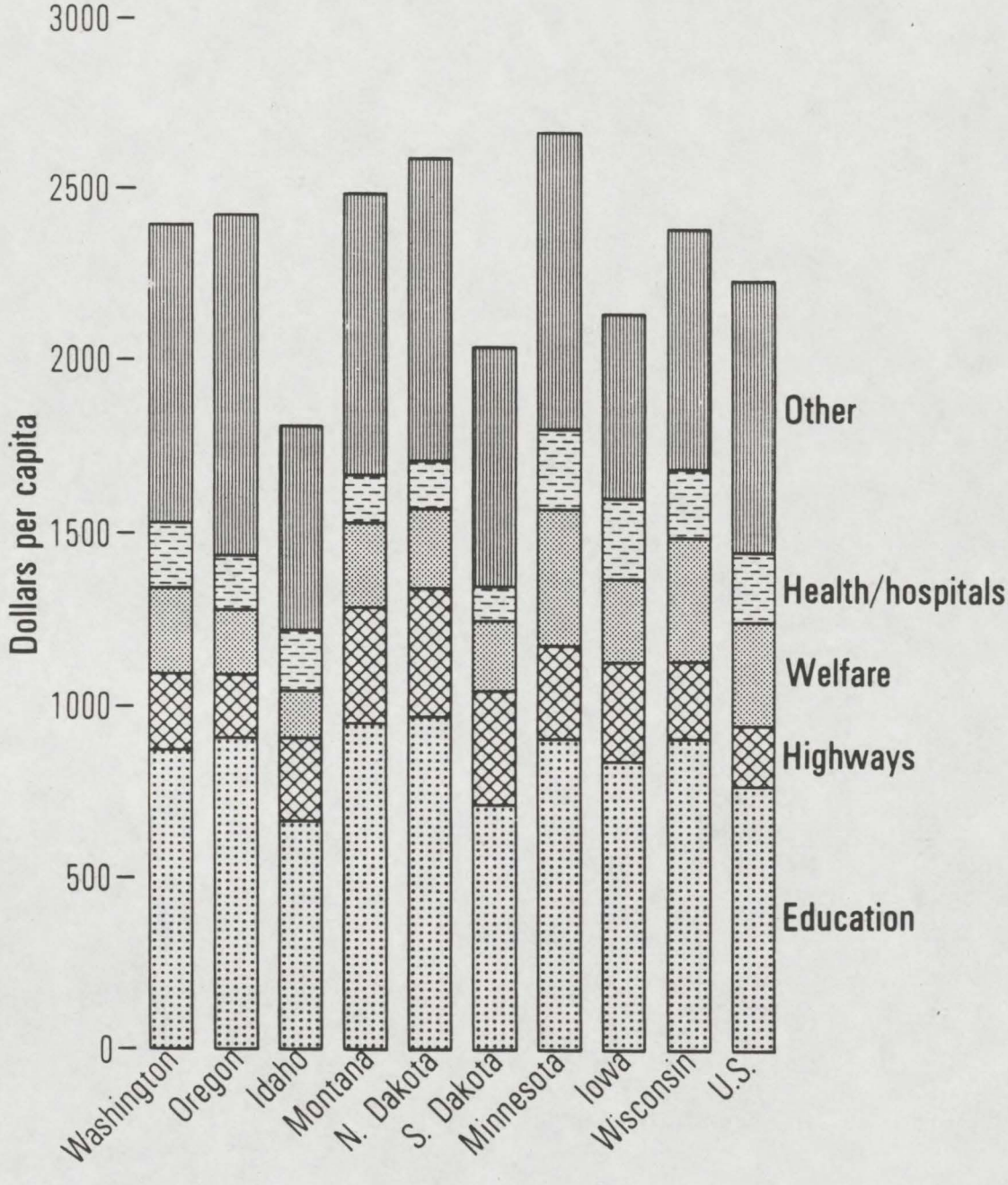

Figure 19. Per capita state and local expenditures, including federal aids, 1984. See text for discussion of the "other" category. Sources: calculated from data in SAUS 1987, Table 442, pp. 260-261, and tables showing resident population of the U. S. and states.

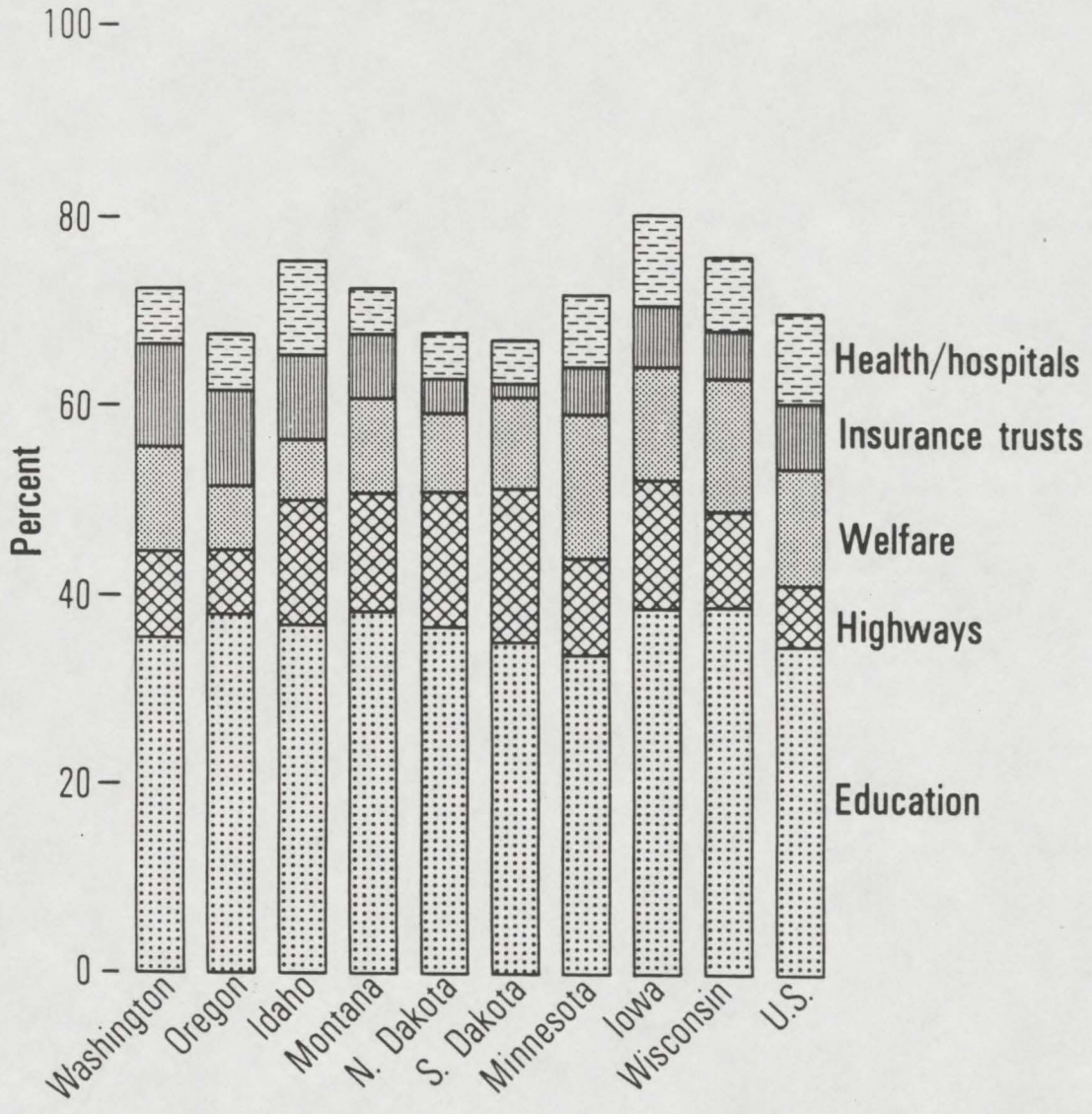

Figure 20. Relative shares of state and local government expenditures, including federal aids, for major categories, 1984. The remaining percentage, not shown by the bars, went to a wide variety of "other" categories (see text). Source: same as Table 7.

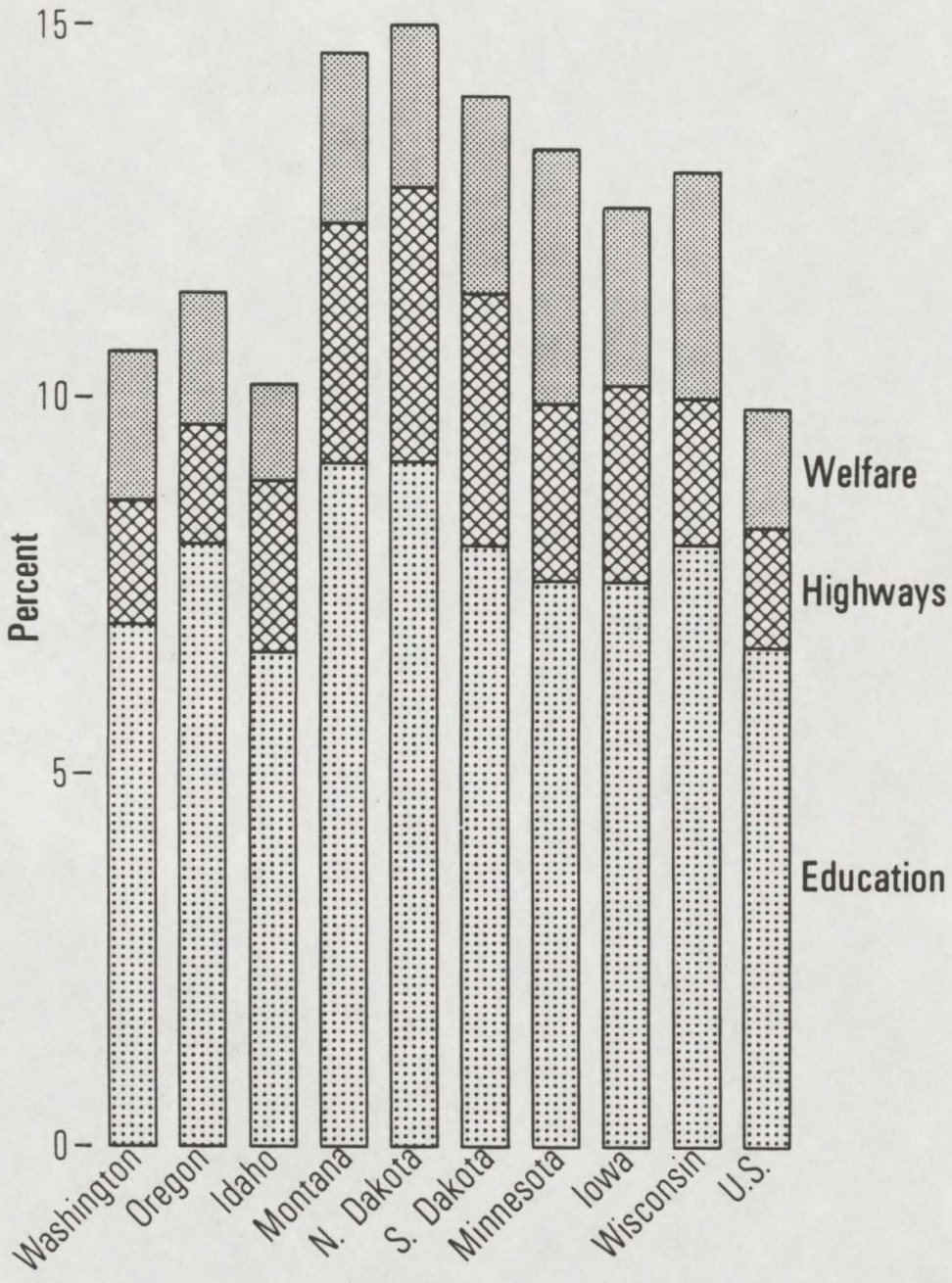

Figure 21. Combined state and local government expenditures in three major categories as a percentage of personal income, 1984. Source: same as Table 7.

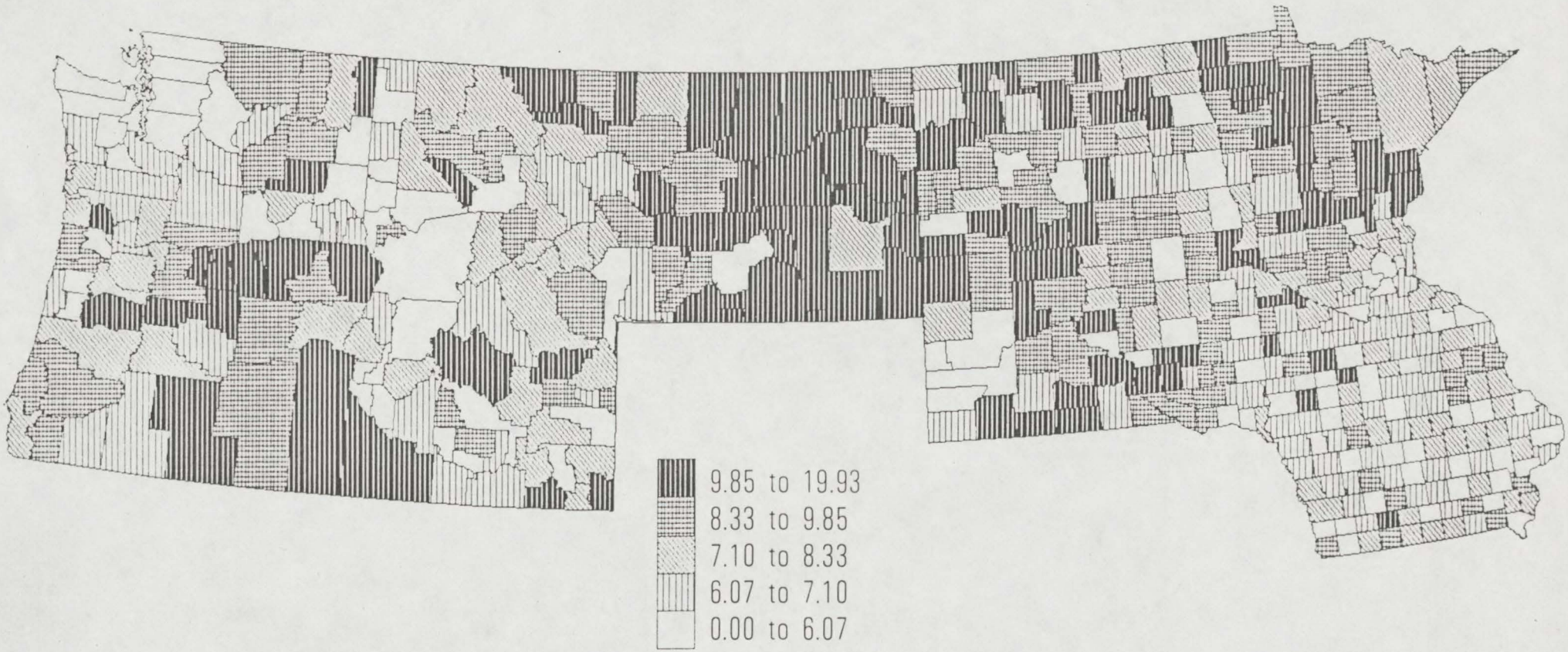

Figure 22. 1982 local expenditures for education as a percentage of county mean personal income for 1970, 1980, and 1984. Expenditures include funds from local sources and funds from state or federal aids. Sources: U. S. Censuses of Governments (1982) and Population (1970, 1980, 1984).

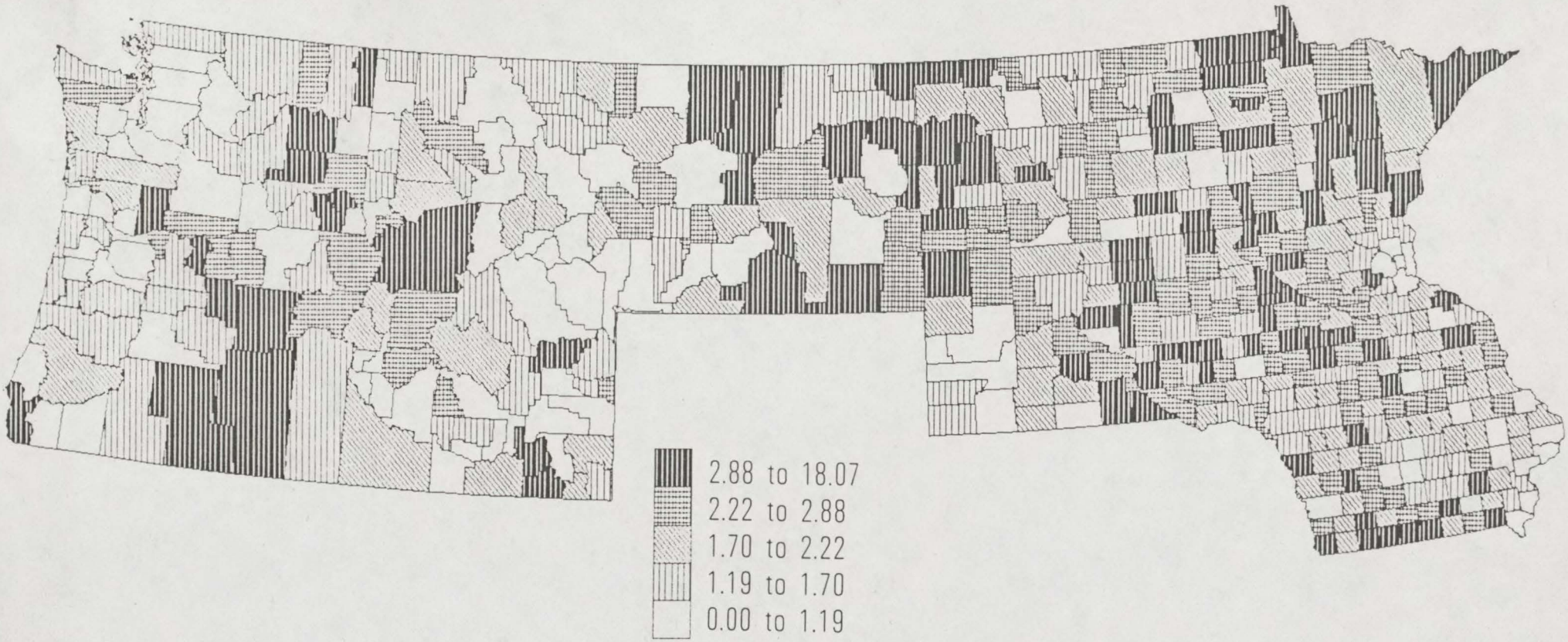

Figure 23. 1982 expenditures for highways by local government units within each county as a percentage of county mean personal income for 1970, 1980, and 1984. Expenditures include funds from state aids. Sources: U. S. Census of Governments (1982) and Population.

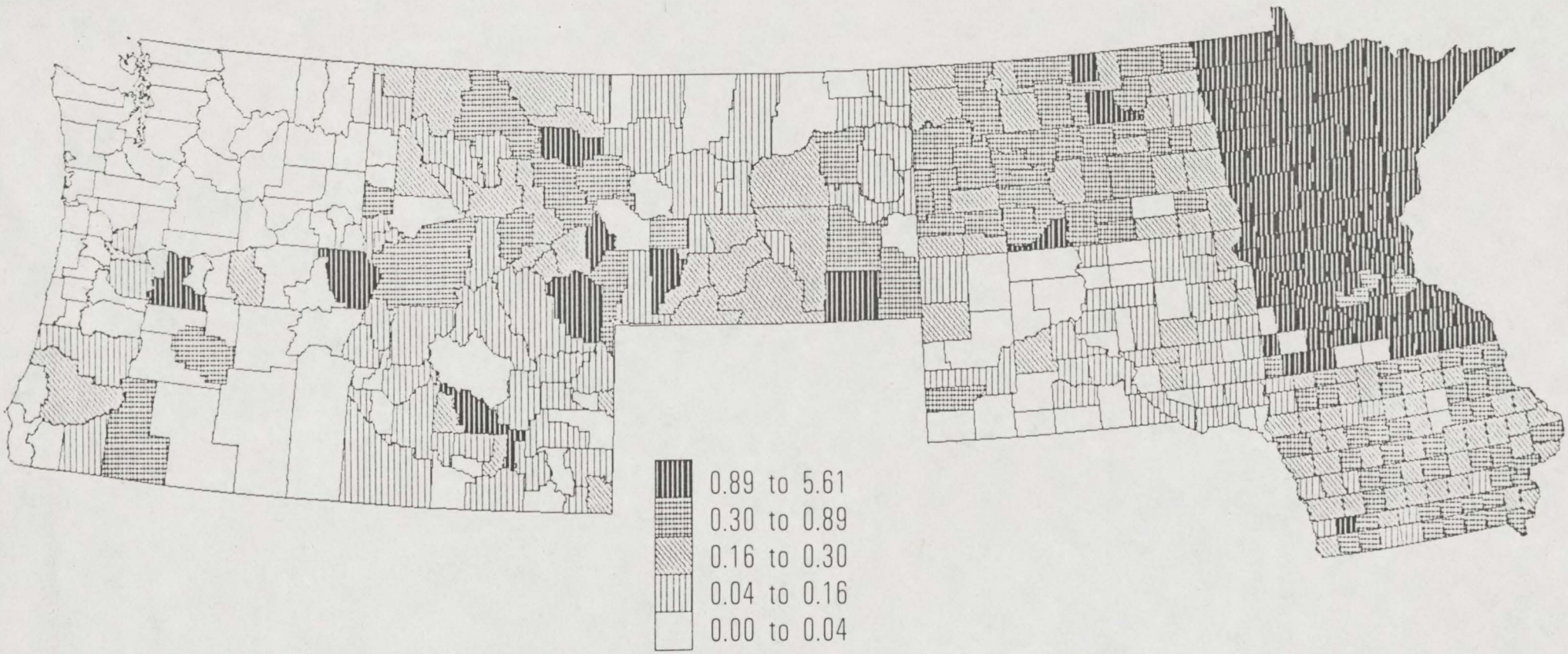

Figure 24. 1982 expenditures for public welfare by local government units within each county as a percentage of mean personal income for 1970, 1980, and 1984. Expenditures include state aids. Sources: U. S. Censuses of Governments (1982) and Population.